

Buku Teks Bahan Ajar Siswa



Paket Keahlian: Teknik Kapal Penangkapan Ikan

Bahasa Inggris Maritim dan Perikanan



Direktorat Pembinaan Sekolah Menengah Kejuruan
Kementerian Pendidikan dan Kebudayaan
Republik Indonesia



KATA PENGANTAR

Prinsip pembelajaran kontekstual (*contextual learning*) yang diharapkan mampu mengubah gaya belajar siswa dalam memahami setiap ilmu dan materi yang dipelajari di sekolah menjadi salah satu komponen dasar penyusunan bahan ajar bagi guru dan siswa. Disisi lain pembelajaran akselerasi (*accelerated learning*) berkontribusi dalam menciptakan nuansa dan iklim kegiatan belajar yang kreatif, dinamis serta tak terbatas oleh sekat ruang kelas (*learning with no boundaries*). Proses pembelajaran tersebut mampu memberi spektrum warna bagi kanvas ilmu pengetahuan yang sejatinya harus menjadi bagian dari proses pengalaman belajar (*experiential learning*) ilmiah, kritis dan dapat diterapkan (*applicable*).

Buku teks siswa SMK tahun 2013 dirancang untuk dipergunakan siswa sebagai literatur akademis dan pegangan resmi para siswa dalam menempuh setiap mata pelajaran. Hal ini tentu saja telah diselaraskan dengan dinamika Kurikulum Pendidikan Nasional yang telah menjadikan Kurikulum 2013 sebagai sumber acuan resmi terbaru yang diimplementasikan di seluruh sekolah di wilayah Republik Indonesia secara berjenjang dari mulai pendidikan dasar hingga pendidikan menengah.

Buku ini disusun agar menghadirkan aspek kontekstual bagi siswa dengan mengutamakan pemecahan masalah sebagai bagian dari pembelajaran dalam rangka memberikan kesempatan kepada siswa agar mampu mengkonstruksi ilmu pengetahuan dan mengembangkan potensi yang dimiliki oleh setiap individu mereka sendiri. Secara bahasa, buku ini menggunakan bahasa yang komunikatif, lugas dan mudah dimengerti. Sehingga, siswa dijamin tidak akan mengalami kesulitan dalam memahami isi buku yang disajikan.

Kami menyadari bahwa penyusunan dan penerbitan buku ini tidak akan dapat terlaksana dengan baik tanpa dukungan dan bantuan dari berbagai pihak. Kami ucapkan terima kasih atas dukungan dan bantuan yang diberikan. Semoga buku ini dapat memberi kontribusi positif bagi perkembangan dan kemajuan pendidikan di Indonesia.

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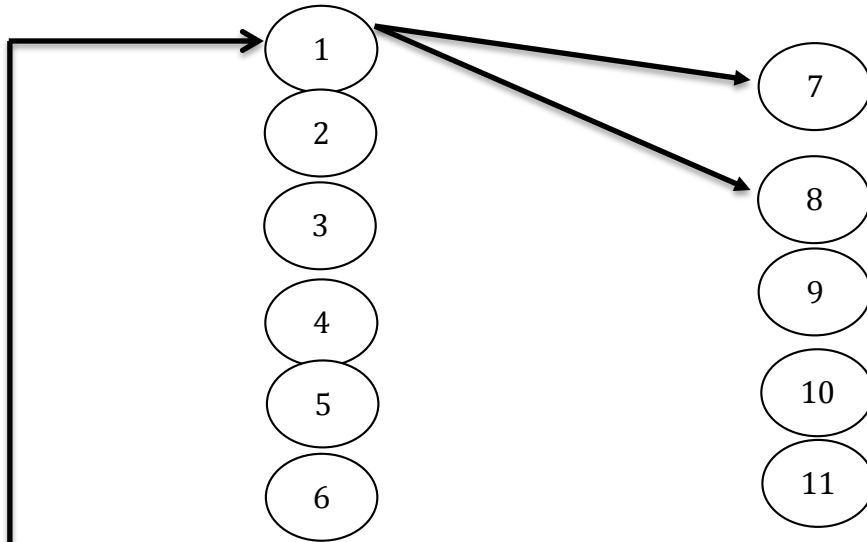
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PETA KEDUDUKAN BAHAN AJAR



STANDAR KOMPETENSI NAUTIKA
1. Menerapkan Hukum Laut & Perikanan
2. Menerapkan Stabilitas dan Bangunan Kapal
3. Menerapkan Prosedur Darurat di Kapal
4. Mengoperasikan Alat navigasi Konvensional & Kompas Magnit
5. Mengoperasikan Alat navigasi Elektronik
6. Menggunakan berbagai parameter Meteorologi dan Oceanografi dalam penangkapan ikan
7. Menerapkan manajemen kapal penangkap ikan dan kepelabuhanan
8. Melakukan perawatan dan penangkapan berbagai macam alat penangkapan ikan
9. Melakukan Komunikasi diatas kapal
10. Menerapkan dasar-dasar elektronika
11. Mengoperasikan instalasi tenaga penggerak utama kapal
12. Merencanakan Pelayaran dan Pelayaran Datar
13. Melakukan dinas jaga / P2TL di kapal
14. Melaksanakan penanganan dan penyimpanan hasil tangkap
15. Menerapkan tatalaksana perikanan yang bertanggung jawab (CCRF)
16. Mengolah gerak dan mengendalikan kapal
17. Menggunakan bahasa Inggris maritim dan perikanan

I. PENDAHULUAN

A. Deskripsi

Bahasa Inggris Maritim dan Perikanan (BIMP) adalah mata pelajaran Bahasa Inggris yang dirancang khusus bagi para awak kapal yang bahasa tutur aslinya bukan Bahasa Inggris. Selain itu, BIMP juga diorientasikan bagi kebutuhan sekolah tinggi/lanjutan di bidang kelautan/pelayaran/perkapalan (*marine/nautical/shipping*) serta profesional yang sedang menggeluti bidang tersebut. Pasar global telah berimplikasi kepada penciptaan daya saing secara internasional. Bukan hanya pada produk pasar saja, tetapi juga kompetisi sumberdaya manusianya. Oleh karena itu, kemampuan setiap individu untuk mampu bertahan didalam kancah global ini menjadi tolak ukur keberhasilan yang nyata. Salah satu peran kunci yang dapat dimainkan dalam menghadapi tantangan itu adalah kemampuan personal untuk dapat berkomunikasi secara global dengan menggunakan alat komunikasi, dalam hal ini bahasa, yang bisa dipahami oleh seluruh kalangan di dunia internasional. Alat/bahasa yang dimaksud adalah bahasa Inggris.

Lebih khusus lagi bahwa bahasa inggris untuk dunia maritim ini termasuk kedalam kategori *English for Specific Purposes* (ESP). Dengan kata lain, bahasa Inggris yang digunakan merupakan bahasa yang memiliki karakter dan terminologi tertentu yang hanya ditujukan untuk tujuan-tujuan tertentu (spesifik). Sehingga, dalam mempelajari dan mempergunakan bahasa Inggrisnya pun diperlukan situasi dan kondisi khusus agar pembelajaran yang dimaksudkan dapat lebih memberikan pengalaman belajar yang paling tidak mendekati atau hampir mirip (dalam alam pemikirannya) seperti situasi sebenarnya.

Kemampuan siswa dalam mengidentifikasi bagian-bagian dari kapal serta komponen yang menyertainya dalam peritilahan asing, khususnya bahasa Inggris, menjadi hal yang mutlak dalam pembelajaran ini. oleh karena itu, pembelajaran kosa kata

(*vocabularies*) secara spesifik dipelajari dalam buku teks siswa Bahasa Inggris Maritim dan Perikanan jilid ke 2. *Marine Communication* adalah standar daam berkomunikasi dalam kegiatan Maritim terutama apabila kita bekerja di atas kapal yang berisi tentang bagaimana pengucapan perintah, permintaan pertolongan, mengabarkan kondisi marabahaya di atas kapal kepada regu penolong atau kapal yang lain agar mudah di pahami sesuai dngan kaidah bahasa inggris dan aturan IMO standar selaku organisasi Maritim Internasiaonal.

Buku ini dirancang untuk dapat digunakan baik di dalam kelas dengan guru sebagai fasilitatornya atau siswa secara individual atau yang dikenal dengan *self-study*. Sehingga memungkinkan siapapun dapat menggunakan buku ini sebagai salah satu bahan rujukan dalam meningkatkan kompetensi dan keterampilan berbahasa Inggris di dunia Maritim.

B. Prasayarat

Untuk dapat mengikuti kegiatan belajar mata pelajaran Bahasa Inggris Maritim ini setidaknya siswa sudah memahami dan bisa melakukan *pronunciation* (pelafalan) dasar seperti *alphabetical order pronunciation*, mengetahui sejumlah kata Kerja (*Verbs*), baik *Regular Verbs* maupun *Irregular Verbs*, serta penggunaannya dalam konteks pola kalimat *yang sesuai*. Buku Teks mata pelajaran Bahasa Inggris Maritim ini dimaksudkan sebagai Bahan Ajar Siswa SMK yang diorientasikan bagi peserta didik atau siswa pada Sekolah Menengah Kejuruan Program Keahlian Nautika dan Teknik Kapal Penangkap Ikan, sebagai Buku Teks lanjutan dari buka yang telah dipelajari sebelumnya.

C. Petunjuk Penggunaan

1. Prinsip-prinsip Belajar

Berfokus pada siswa (student centered learning),
Peningkatan kompetensi seimbang antara pengetahuan, keterampilan dan sikap,
Kompetensi didukung oleh beberapa hal yaitu : inovatif, kreatif, afektif, dinamis
dan produktif.

2. Pembelajaran

- a. Mengamati (melihat, mengamati, membaca, mendengar, menyimak)
Menanya (mengajukan pertanyaan yang bersifat faktual hingga yang bersifat hipotesis)
Pengumpulan data (menentukan data yang diperlukan, menentukan sumber data, mengumpulkan data)
Mengasosiasi (menganalisis data, menyimpulkan dari hasil analisis data)
Mengkomunikasikan (menyampaikan hasil konseptualisasi dalam bentuk lisan, tulisan diagram, bagan, gambar atau media)

3. Penilaian/*asesment*

- a. Penilaian dilakukan berbasis kompetensi,
Penilaian tidak hanya mengukur kompetensi dasar tetapi juga kompetensi inti dan standar kompetensi lulusan.
Mendorong pemanfaatan portofolio yang dibuat siswa sebagai instrument utama penilaian kinerja siswa pada pembelajaran di sekolah dan industri.
Penilaian dalam pembelajaran dapat dilakukan secara terpadu dengan proses pembelajaran.
Aspek penilaian pembelajaran meliputi hasil belajar dan proses belajar siswa.

Penilaian dapat dilakukan dengan menggunakan tes tertulis, observasi, tes praktik, penugasan, tes lisan, portofolio, jurnal, inventori, penilaian diri, dan penilaian sebaya atau antar teman (*peer assessment*).

Pengumpulan data penilaian selama proses pembelajaran melalui observasi juga penting untuk dilakukan.

Data aspek afektif seperti sikap ilmiah, minat, dan motivasi belajar dapat diperoleh dengan observasi, penilaian diri, dan penilaian antar teman.

D. Tujuan Akhir

1. Setiap individu siswa dapat memiliki teori kemampuan dasar Bahasa Inggris umum sebagai pengantar menuju pembelajaran Bahasa Inggris untuk bidang/ilmu pengetahuan tertentu, dalam hal ini bidang Maritim dan Perkapalan;
2. Siswa dapat menggunakan bahasa Inggris sebagai alat komunikasi yang efektif dan sederhana dalam bentuk percakapan sehari-hari;
3. Siswa dapat memahami dan dapat menguasai teori dasar Bahasa Inggris Maritim dan Perikanan sehingga dapat mengikuti dan mempelajari pembelajaran Bahasa Inggris Maritim tingkat selanjutnya yang lebih kompleks.

E. Kompetensi Inti dan Dasar

Memahami tentang pola bahasa Inggris Maritim dan Perikanan dan penggunaan dalam kegiatan kelautan dan perikanan

BIDANG KEAHLIAN : PERIKANAN DAN KELAUTAN

PROGRAM KEAHLIAN : TEKNOLOGI PENANGKAPAN IKAN

MATA PELAJARAN : BAHASA INGGRIS MARITIM DAN PERIKANAN (BIMP)

KELAS : X

KOMPETENSI INTI	KOMPETENSI DASAR
1. Menghayati dan mengamalkan ajaran agama yang dianutnya.	1.1 Meyakini anugerah Tuhan pada pembelajaran bahasa inggris maritim dan perikanan sebagai amanat untuk kemaslahatan umat manusia.
2. Menghayati dan mengamalkan perilaku jujur, disiplin, tanggungjawab, peduli (gotong royong, kerjasama, toleran, damai), santun, responsif dan pro-aktif dan menunjukan sikap sebagai bagian dari solusi atas berbagai permasalahan dalam berinteraksi secara efektif dengan lingkungan sosial dan alam serta dalam menempatkan diri sebagai cerminan bangsa dalam pergaulan dunia.	2.1 Menghayati sikap cermat, teliti dan tanggungjawab sebagai hasil dari pembelajaran bahasa inggris maritim dan perikanan 2.2 Menghayati pentingnya kerjasama sebagai hasil pembelajaran bahasa inggris maritim dan perikanan 2.3 Menghayati pentingnya bersikap jujur, disiplin serta bertanggungjawab sebagai hasil dari pembelajaran bahasa inggris maritim dan perikanan
3. Memahami, menerapkan dan menganalisis pengetahuan faktual, konseptual, dan prosedural berdasarkan rasa ingin tahunya tentang ilmu pengetahuan, teknologi, seni, budaya, dan humaniora dalam wawasan kemanusiaan, kebangsaan, kenegaraan, dan peradaban terkait penyebab fenomena dan kejadian dalam bidang kerja yang spesifik untuk memecahkan masalah.	3.1 Menerapkan bahasa inggris maritim 3.2 Menerapkan bahasa inggris maritim di kapal perikanan
4. Mengolah, menalar, dan menyaji dalam ranah konkret dan ranah abstrak terkait dengan pengembangan dari yang dipelajarinya di sekolah secara mandiri, dan mampu melaksanakan tugas spesifik di bawah pengawasan langsung	4.1 Melaksanakan bahasa inggris maritim 4.2 Melaksanakan komunikasi bahasa inggris maritim di kapal perikanan

D. Cek Kemampuan Awal

No	PERTANYAAN	JAWABAN	
		YA	TIDAK
1	Apakah anda sudah mengenal istilah bagian-bagian Kapal dalam bahasa Inggris?		
2	Apakah anda mengenal dan memahami kala kalimat (<i>tenses</i>) dalam bahasa Inggris?		
3	Apakah anda dapat menulis cerita singkat menggunakan bahasa Inggris?		
4	Apakah anda mengenal dan mampu mengidentifikasi <i>conditional types</i> ?		
5	Apakah anda mengenal dan mampu mengidentifikasi <i>passive sentences</i> ?		
6	Apakah anda bisa berkomunikasi secara efektif dengan bahasa Inggris didalam dunia Maritim dan Perkapalan?		
7	Apakah anda mengetahui peristilahan dan kosa kata bahasa Inggris untuk dunia Maritim dan Perkapalan?		

II. PEMBELAJARAN

Kegiatan Pembelajaran 1 : Ship Knowledge

A. Deskripsi

Pengetahuan tentang dunia maritim, kelautan dan perkapalan memang tidak akan bisa dilepaskan dari keberadaan Kapalnya (*the ship*) itu sendiri. Menurut kamus bahasa besar Bahasa Indonesia, kapal adalah kendaraan pengangkut manusia dan barang di air (laut, sungai, danau dan lain-lain). Sedangkan perahu adalah kendaraan air yang biasanya tidak bergeladak, bagian depannya kecil/lancip dan bagian tengahnya lebar. Kapal (*ship*) berukuran lebih besar dari perahu (*boat*).

Seorang awak kapal haruslah memiliki pengetahuan yang benar tentang seluk beluk, bagian-bagian serta komponen kapalnya. Hal ini sangatlah dibutuhkan manakala mereka bergelut hampir setiap saat dengan peralatannya. Secara umum kapal memiliki bagian-bagian sebagai berikut:

lambung (shell)

a. alas (bottom)

sisi (side)

alas (bottom)

a. alas tunggal (single bottom)

alas dalam (inner bottom)

alas ganda, dasar ganda (double bottom)

sisi (side)

sekat (bulkhead)

a. sekat tubrukan (collision bulkhead)

sekat ceruk buritan (after peak bulkhead)

sekat kamar mesin (engine room bulkhead)

dan sebagainya

geladak (deck)

a. geladak utama (main deck)

geladak antara (tween deck)

geladak cuaca (weather deck)

palkah (hold)

Ruang Mesin (engine room)

lubang palkah (hatchway)

a. ambang palkah (hatchway coaming)

bangunan atas (superstructure)

a. akil, agil (forecastle)

anjungan (bridge)

kimbul (poop)

bagian bangunan atas

a. geladak bangunan atas (superstructure deck)

sisi bangunan atas (sides of superstructure)

sekat ujung bangunan atas (end bulkheads of superstructure)

rumah geladak (deckhouse)

a. geladak sekoci (boat deck)

geladak navigasi (navigation deck, bridge deck)

geladak kompas (compass deck)

bagian rumah geladak

a. geladak rumah geladak (deck of a deckhouse)

sisi rumah geladak (sides of a deckhouse)

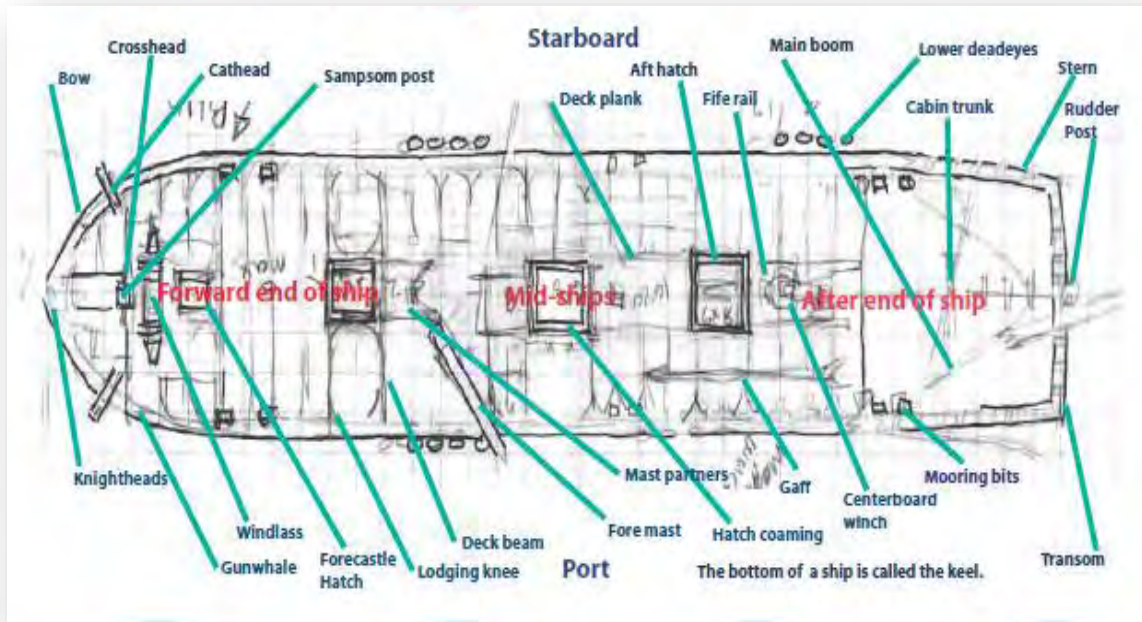
sekat ujung rumah geladak (end bulkheads of a deckhouse)

ceruk (peak)

a. ceruk buritan (after peak)

ceruk haluan (fore peak)

Coba anda lihat dan perhatikan gambar dibawah ini. Berikut adalah bagian-bagian kapal secara umum.



B. Kegiatan Belajar

1. Tujuan Pembelajaran

- a. Melalui kegiatan pembelajaran ini siswa diajak untuk mengenal, mengetahui dan memahami bagian-bagian kapal dalam bahasa Inggris. Selanjutnya siswa diajak untuk mengamati, menghafal dan mengidentifikasi bagian-bagian kapal, peralatan pendukung, berikut fungsi dan kegunaannya.

2. Uraian Materi

The concern here is to examine more closely how words or ship vocabularies work and certainly are understandable in order to make a coherent and meaningful piece of English. The words and structures examined in the Grammar sections are used in the reading passages to show how they work in texts and exercises are given to check that the student has understood their meaning and uses. Exercises are also given to help the student realize how sentences and paragraphs are linked on a grammatical and semantic basis to give a passage coherence and unity. This insight will also help him with his writing. In order to show that passages raise questions as well as answer them, the student is sometimes asked to use his imagination to try and answer questions not answered in the text. It is hoped that these questions will stimulate discussion and a desire for further reading.

Let's check out the example!

a. Reading

¹Merchant ships are designed to carry cargo. ²Some are also designed to carry passengers. ³Nowadays most merchant ships are built to carry cargo. ⁴A few still carry passengers. ⁵Merchant vessels can operate in the following three basic ways.

⁶They can operate as liners. ⁷Liners are employed on regular routes on a fixed timetable. ⁸A list of their arrival and departure dates is published in advance. ⁹They sail whether they are full or not.

¹⁰Merchant vessels can also operate as tramps. ¹¹Tramps do not sail on regular routes. ¹²They do not keep to a fixed timetable. ¹³They are employed in all parts of the world where there is cargo for them to carry.

¹⁴A large numbers of merchant ships operate as specialized vessels. ¹⁵These are designed to carry a particular type of cargo.

Now read the passage more carefully. Underline the words you do not understand. Before you use your dictionary or ask your teacher, remember that the meaning of a word can often be got (a) from the context (e.g. 'vessels', sentence 5, means 'ships'), (b) by studying the word to see if it is derived from a noun or verb etc. that you already know (e.g. 'arrival', sentence 8, from 'to arrive').

Use the information in the reading passage to complete the sentences.

Merchant ships are designed to carry

Liners are employed

Tramps are not employed

Specialized vessels are designed

In the past a ship's log was a book for recording the distance a ship travelled. Now it is much more. Discuss with a partner what information is in a modern ship's log.

Study this entry in a ship's log and answer the questions:

TEXT 1

Wed. 5th July	We are at single anchor in Plymouth Sound
Tues. 10 July 15.00	The pilot comes on board
15.30	We weigh anchor and proceed towards the harbour
16.15	The ship grounds on the western side of Plymouth Sound
17.45	Two tugs lash alongside. They put up a head line and a stern line
18.15	The ship goes off into deep water. We make fast to a mooring buoy
18.30	Pilot leaves the ship

- 1) Find words in the log that mean:
 - a) one
 - b) (to) raise
 - c) (to) go towards
 - d) rope/cable
 - e) (to) tie up (2x)

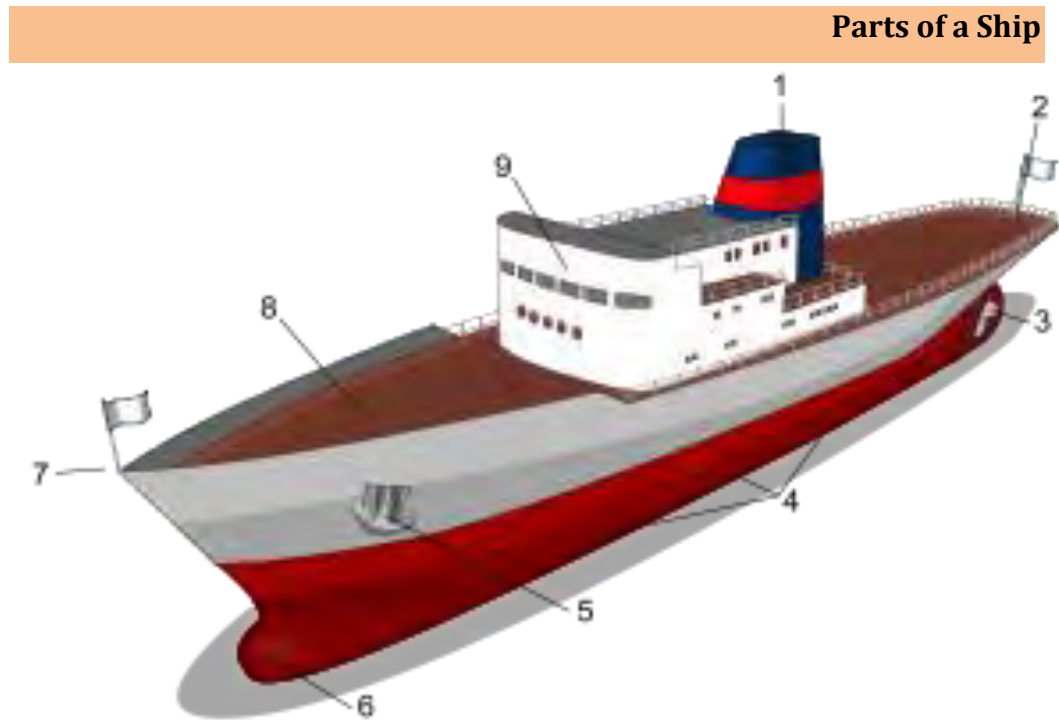
- 2) What does the log describe?
 - a) a ship sinking
 - b) a ship leaving harbour
 - c) an accident

- 3) Which one of these things does not happen in the log of 5th July?
 - a) towing
 - b) docking
 - c) mooring
 - d) reversing

b. Vocabulary

Amatilah Gambar dibawah ini!

Identify yourself what parts of a ship you have familiar with.



- 1: Smokestack; 2: Stern; 3: Propeler; 4: Portside (*sebelah kanan dikenal dengan nama starboard*); 5: Anchor; 6: Bulbous bow; 7: Bows; 8: Deck; 9: Ships's Bridge

Other useful vocabulary (places/positions):

Abeam	At right angles to the ship but not on the ship
Aboard	On the ship
Above deck	On the deck but not over it
Abreast	By the side of the ship
Aft	Toward the stern
Ahead	In a forward direction

Alee	Away from the direction of the wind
Alo	Above the deck
Amidships	Towards the centre of the ship
Astern	In the rear of the ship
Below	Under the deck
Dead ahead	Directly ahead
Fore-and-aft	In a line parallel to the ship
Headway	The forward motion of the ship
Inboard	Inside the ship
Lee	The side away from the wind
Leeward	The direction away from the wind
Leeway	The sideways movement of the boat caused by either wind or current
Midship	Mid way between bow and stern
Overboard	Over the side of the ship
Stem	The forward most part of the bow

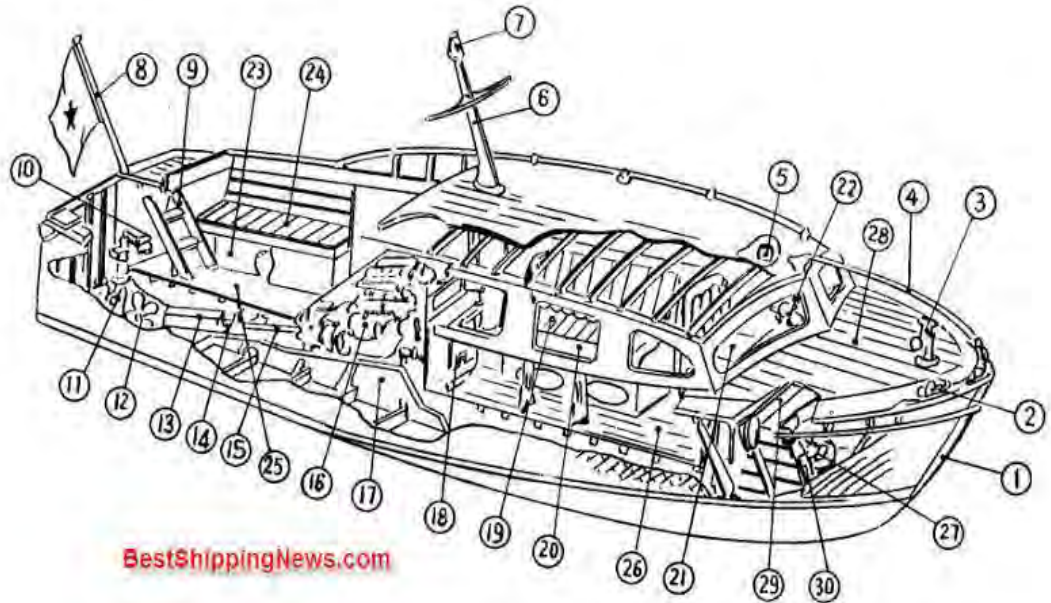
Coba anda amati dan perhatikan gambar dibawah ini. Gambar ini memperlihatkan kepada anda tentang jenis-jenis haluan kapal.



The various shapes of the bow can be seen on the picture above. Mind to discuss and review the picture in detail either individual or in pairs.

c. Speaking

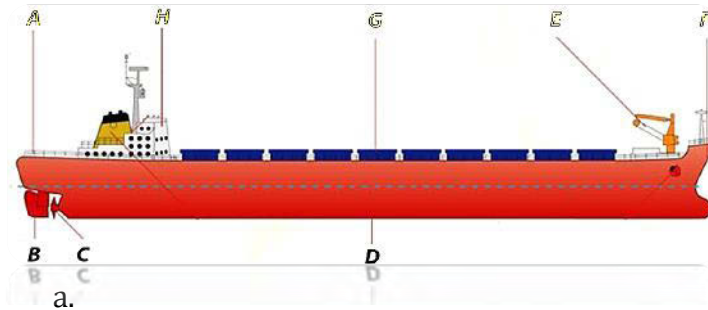
Listen and Repeat the words that is pronounced by the teacher! The words are coming from the ship vocabularies based on the picture below.



- | | | | |
|---------------------|----------------------|---------------------|----------------------------------|
| 1 . Stern | 11 . Rudder | 21 . Steering seat | 31 . Bottom frame |
| 2. Fair-lead | 12 . Propeller | 22 . Steering wheel | 32 . Longitudinal girder |
| 3. Cross bitt | 13 . Boss timber | 23. Fuel oil tank | 33 . Bracket |
| 4. Hand rail | 14 . Stuffing box | 24. Bench | 34 . Keel |
| 5. Bi-colored light | 15 . Propeller shaft | 25 . Cockpit | 35 . Planking |
| 6. Mast | 16 . Main engine | 26 . Cabin | 36 . Seam batten |
| 7 . Mast head light | 17 . Engine bed | 27 . Store | 37 . Bracket for frame or gusset |
| 8. Ensign staff | 18 . Locker | 28 . Deck | 38 . Chine member |
| 9. Step | 19 . Sofa | 29 . Beam | 39 . Gunwale |
| 10 . Quadrant | 20 . Folding table | 30 . Frame | 40 . Beam bracket |

Latihan !

Use these words on the right box to name the parts of the ship (A-H) and name any other parts you know.



Stern
keel
rudder
bows
davit
container
bridge
propeller

Match the words on the left with definitions on the right.

bows	towards the front
stern	opening in the deck
port side	right side
starboard side	a projection below the hull
aft	living area
forward	command station
hull	machine to move heavy things
keel	point that is most forward
bridge	kitchen
hatch way	the rear
galley	towards the rear
windlass	body of a ship
quarters	left side

d. Grammar

THE PRESENT PERFECT TENSE

Study this text:

The Perfect Tense expresses what someone has done or what has happened. It tells us about a period of time from the past until now. The result is still relevant now.

The Boatswain has received a number of orders because of the storm. As soon as the Third Officer has come from his watch he goes to inspect the Boatswain's work.

- "Have you checked all lashings on deck and doubled them?" he asks.

- "No, I haven't, not yet, sir," answers the Boatswain.

- "Have you secured all hatch covers?"

- "Yes, I have indeed, sir. The deckhands have cleared away all loose gear from the deck. They have also tightened all the life boat gripes. Finally they have made sure that all the cranes are secure", answers the Boatswain. The Boatswain has done a thorough job as always.

The Present Perfect is formed with the auxiliary have/ has + past participle of the main verb. The past participle has the ending -ed for regular verbs and is the third form in the list of irregular verb

Examples:

I have written down the message.

A vessel *has entered* the fairway at Mouro Lighthouse.

The present perfect is formed by

S + have or has + past participle

When the past participle of a regular verb is formed by → *stem + -ed*
("worked")

I / we / you / they	have	sailed finished lost written
----->		
He / She / It	has	been Etc.

The present perfect indicates that there is a connection between past and present. This connection may be a result or a continuation of something that started in the past and is still going on now.

Exercise.

Do these following questions as the examples.

Examples

A: Your room looks nice!

B: I've painted (paint) that wall a different colour.

B: Yes, please!

A: Emma has made (make) a chocolate cake. Do you want some?

1. Kate and I _____ (organise) a party for Carly on Saturday. I hope you can come.

2. The president _____ (begin) his tour of Europe. It will last for a week.

3. A: Does Sarah know about your new girlfriend? _____
(you/tell/her)?
B: No, but I will.
4. David is back at work today. _____(be) to a conference in the Netherlands.
5. Your car looks great. _____ (Ben/wash) it for you?
6. I don't think Rachel is in the office today. I've left three messages for her, but she _____ (not/reply) to them.
7. Jack knows a lot about photography. _____ (write) four books about it.
8. I can't find any nice postcards. _____ (you/see) any?
9. I gave a scarf to my mother last year but she _____ (not/wear) it yet.
10. Are Mark and Sam here or _____ (go) to the sports centre?

Complete List of Present Perfect Forms

Examples:

- You **have seen** that movie many times.
- **Have** you **seen** that movie many times?
- You **have not seen** that movie many times.

USE 1 Unspecified Time Before Now



We use the Present Perfect to say that an action happened at an unspecified time before now. The exact time is not important. You **CANNOT** use the Present Perfect with specific time expressions such as: yesterday, one year ago, last week, when I was a child, when I lived in Japan, at that moment, that day, one day, etc. We **CAN** use the Present Perfect with unspecific expressions such as: ever, never, once, many times, several times, before, so far, already, yet, etc.

Examples:

- I **have seen** that movie twenty times.
- I think I **have met** him once before.
- There **have been** many earthquakes in California.
- People **have traveled** to the Moon.
- People **have not traveled** to Mars.
- **Have you read** the book yet?
- Nobody **has** ever **climbed** that mountain.
- A: **Has** there ever **been** a war in the United States?
B: Yes, there **has been** a war in the United States.

How Do You Actually Use the Present Perfect?

The concept of "unspecified time" can be very confusing to English learners. It is best to associate Present Perfect with the following topics:

TOPIC 1. Experience

You can use the Present Perfect to describe your experience. It is like saying, "I have the experience of..." You can also use this tense to say that you have never had a certain experience. The Present Perfect is NOT used to describe a specific event.

Examples:

- I **have been** to France.

THIS SENTENCE MEANS THAT YOU HAVE HAD THE EXPERIENCE OF BEING IN FRANCE. MAYBE YOU HAVE BEEN THERE ONCE, OR SEVERAL TIMES.

- I **have been** to France three times.

YOU CAN ADD THE NUMBER OF TIMES AT THE END OF THE SENTENCE.

- I **have never been** to France.

THIS SENTENCE MEANS THAT YOU HAVE NOT HAD THE EXPERIENCE OF GOING TO FRANCE.

- I think I **have seen** that movie before.
- He **has never traveled** by train.
- Joan **has studied** two foreign languages.
- A: **Have** you ever **met** him?
B: No, I **have not met** him.

TOPIC 2. Change Over Time

We often use the Present Perfect to talk about change that has happened over a period of time.

Examples:

You have grown since the last time I saw you.

The government **has become** more interested in arts education.

Japanese **has become** one of the most popular courses at the university since the Asian studies program was established.

My English **has** really **improved** since I moved to Australia.

TOPIC 3. Accomplishments

We often use the Present Perfect to list the accomplishments of individuals and humanity. You cannot mention a specific time.

Examples:

Man has walked on the Moon.

Our son has learned how to read.

Doctors have cured many deadly diseases.

Scientists have split the atom.

TOPIC 4. An Uncompleted Action You Are Expecting

We often use the Present Perfect to say that an action which we expected has not happened. Using the Present Perfect suggests that we are still waiting for the action to happen.

Examples:

- James **has not finished** his homework yet.
- Susan **hasn't mastered** Japanese, but she can communicate.
- Bill **has** still **not arrived**.
- The rain **hasn't stopped**.

TOPIC 5. Multiple Actions at Different Times

We also use the Present Perfect to talk about several different actions which have occurred in the past at different times. Present Perfect suggests the process is not complete and more actions are possible.

Examples:

- The army **has attacked** that city five times.
- I **have had** four quizzes and five tests so far this semester.
- We **have had** many major problems while working on this project.
- She **has talked** to several specialists about her problem, but nobody knows why she is sick.

Time Expressions with Present Perfect

When we use the Present Perfect it means that something has happened at some point in our lives before now. Remember, the exact time the action happened is not important.



Sometimes, we want to limit the time we are looking in for an experience. We can do this with expressions such as: in the last week, in the last year, this week, this month, so far, up to now, etc.



Examples:

- **Have you been** to Mexico **in the last year**?
- I **have seen** that movie six times **in the last month**.
- They **have had** three tests **in the last week**.
- She graduated from university less than three years ago. She **has worked** for three different companies **so far**.
- My car **has broken** down three times **this week**.

NOTICE

"Last year" and "in the last year" are very different in meaning. "Last year" means the year before now, and it is considered a specific time which requires Simple Past. "In the last year" means from 365 days ago until now. It is not considered a specific time, so it requires Present Perfect.

Examples:

- I **went** to Mexico **last year**.
I WENT TO MEXICO IN THE CALENDAR YEAR BEFORE THIS ONE.

- I **have been** to Mexico **in the last year**.

I HAVE BEEN TO MEXICO AT LEAST ONCE AT SOME POINT BETWEEN 365 DAYS AGO AND NOW.

USE 2 Duration From the Past Until Now (Non-Continuous Verbs)



With Non-Continuous Verbs and non-continuous uses of Mixed Verbs, we use the Present Perfect to show that something started in the past and has continued up until now. "For five minutes," "for two weeks," and "since Tuesday" are all durations which can be used with the Present Perfect.

Examples:

- I **have had** a cold for two weeks.
- She **has been** in England for six months.
- Mary **has loved** chocolate since she was a little girl.

Although the above use of Present Perfect is normally limited to Non-Continuous Verbs and non-continuous uses of Mixed Verbs, the words "live," "work," "teach," and "study" are sometimes used in this way even though they are NOT Non-Continuous Verbs.

ADVERB PLACEMENT

The examples below show the placement for grammar adverbs such as: always, only, never, ever, still, just, etc.

Examples:

- You have **only** seen that movie one time.
- Have you **only** seen that movie one time?

ACTIVE / PASSIVE

Examples:

- Many tourists **have visited** that castle. *ACTIVE*
- That castle **has been visited** by many tourists. *PASSIVE*

Mengasosiasi - Mengkomunikasi

Buatlah catatan dan kesimpulan dari hasil pengamatan, diskusi dan eksplorasi yang telah anda lakukan, lalu sampaikan dalam kelas hasil pengamatan anda!

4. Tugas

Answer this following question to test your knowledge of ship's motion.

- 1) When the wind hits a ship amidships which of these vessels turns towards the wind?
 - a. Tug
 - b. Tanker
- 2) What do the words *axial* and *transverse* describe?
 - a. Rudders
 - b. sails
- 3) Which of these is *pitch*?
 - a. bow up, stern down
 - b. port up starboard down
- 4) Waves from astern make a ship speed up and slow down. It is called :
 - a. Yawing
 - b. heaving
- 5) *Rolling* is caused by:
 - a. Waves from abeam
 - b. wind from astern
 - c. ship moving against the current

5. Tes Formatif

Each of these sentences has an error. Find the error and correct it.

Do as an example.

Example: Go forward *towards* a bows.

Go forward towards the bows.

1. The windlass are aft of the bridge.

2. Crews quarters are in the port side.

3. Help I out in the galley please.

4. Go through the hatchway and into the deck.

5. Report you to the bridge now.

6. We paint and scrape a hull of this ship.

7. The propeller are broken.

8. Some keel hit the rocks.

9. Clean the ship from a bows to a stern.

10. There is a hole in the starboard sides of the hull.

Exercise.

present perfect - fill in: *have / has + past participle*.

1. I here for years now, and I still like it! **(to live)**
2. Shenot..... well lately. Therefore shenot ...at the office for days now. **(to feel / to be)**
3. Hethis job since December. **(to have)**
4. Theyhere for hours now - they're still waiting. **(to be)**
5. Have you seen my keys? Ithem. **(to lose)**
6. Since our departure the fuel consumption during the voyage
We not..... out yet what the cause is. **(to increase / to find)**
7. Theynot..... from him for weeks now. **(to hear)**
8. Who the fuel-flow to the engine? **(to reduce)**
9. It seems that wethe wrong lubricant during our home voyage. **(to use)**
10. Oil products the environment for year now. **(to pollute)**

C. Penilaian

1. Sikap

Nilai diperoleh dari pengamatan guru terhadap keaktifan siswa selama proses pembelajaran berlangsung

Lembar Penilaian Sikap

No	Nama Siswa	Kriteria Penilaian				Jumlah Skor	Ket.
		Perhatian (1)	Disiplin (2)	Tekun (3)	Aktif Mendengar dan bertanya (4)		
1.							
2.							
3.							
Dst							

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

$$\text{Nilai akhir} = \frac{\text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Peserta didik memperoleh nilai :

- a. Sangat Baik (SB) : apabila memperoleh skor 3.66 s.d 4.
- b. Baik (B) : apabila memperoleh skor 2.66 s.d 3.65.
- c. Cukup (C) : apabila memperoleh skor 1.66 s.d 2.65.
- d. Kurang (K) : apabila memperoleh skor < 1.65.

2. Pengetahuan

Nilai diperoleh dari Pengamatan selama proses diskusi kelompok, presentasi dan tes tertulis dan penugasan.

Pedoman penilaian :

$$\text{Nilai akhir} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Nilai untuk Keterampilan menggunakan penilaian kuantitatif 1 – 4 :

Sangat Baik = 4

Baik = 3

Cukup = 2

Kurang = 1

3. Keterampilan

Nilai diperoleh dari penyelesaian tugas (baik individu maupun kelompok) pada saat diskusi dan presentasi (bermain peran/*Role play*).

a. Rubrik kegiatan Diskusi

No	Nama Siswa	Aspek Pengamatan					Jml Skor	Nilai	Ket
		Kerja sama	Mengkomunikasikan pendapat	Toleransi	Keaktifan	Menghargai pendapat teman			
1.									
2.									
3.									
4.									
Dst									

Keterangan Skor :

Kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

Keterangan Skor :

$$\text{Nilai} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

b. Rubrik Penilaian Presentasi

No	Nama Siswa	Aspek Penilaian						Σ Skor	Nilai	Ket
		Komuni Kasi	Sistematika penyampaian	Wawasan	Keberanian	Antusias	<i>Gesture</i> dan penampilan			
1.										
2.										
3.										
4.										
5.										
Dst										

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

Keterangan Skor :

$$\text{Nilai} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

c. Lembar Pengamatan Bermain Peran

Kelompok /Kelas :

Kegiatan : Bermain peran /*role play*

Tema /KD :

Nama	Aspek Penilaian			Rata-Rata Nilai
	Partisipasi	Penghayatan Peran	Kerjasama	
1.				
2.				
3.				
4.				
5.				
6.				
dst				

Pedoman Penskoran

Aspek Penilaian	Deskripsi	Nilai
Partisipasi	<ul style="list-style-type: none"> Keterlibatan dalam bermain peran Peran dari tokoh yang diperankan 	60 – 100
Penghayatan Peran	<ul style="list-style-type: none"> Penjiwaan terhadap tokoh Kesesuaian kostum tokoh Semangat bermain peran 	60 – 100
Kerjasama	<ul style="list-style-type: none"> Membantu teman Tanggung rasa dengan teman 	60– 100

Kriteria Pencapaian Kompetensi /Ketuntasan Belajar

Aspek				
Pengetahuan 1-4	Predikat	Keterampilan 1-4	Predikat	Sikap SB/ B/ C/ K
Keterangan		KKM Pengetahuan dan Keterampilan KKM \geq 2.66 KKM Sikap : Baik		

Bila tingkat pencapaian kompetensi anda mencapai KKM > 2.66, maka anda dinyatakan tuntas dan dapat melanjutkan ke kegiatan belajar selanjutnya. Tetapi apabila tingkat pencapaian kompetensi anda mencapai KKM < 2.66 maka anda dinyatakan belum tuntas, maka anda harus mengulangi mulai dari kegiatan belajar, terutama pada bagian yang masih belum anda kuasai.

Kegiatan Pembelajaran 2 : Types of the Ship

A. Deskripsi

Beberapa jenis kapal (ship) yang kita kenal diantaranya dapat dilihat pada rincian dengan definisi singkat berikut dibawah ini.

1. Kapal layar : Kapal yang digerakan dengan layar
2. Kapal Uap : Kapal yang digerakan memakai mesin uap torak maupun turbin uap
3. Kapal motor : Kapal yang digerakan dengan mesin motor (mesin pembakaran dalam)
4. Kapal kayu : Kapal yang konstruksinya terbuat dari kayu, umumnya diperuntukan bagi pelayaran di perairan pedalaman atau antar pulau dan kapal perikanan.
5. Kapal Baja : Kapal yang konstruksinya terbuat dari baja dipakai baik bagi pelayaran interinsuler maupun samudera.
6. Kapal Dagang: Kapal yang dibangun dengan tujuan untuk mengangkut barang dagangan untuk memperoleh keuntungan. Kapal dagang berfungsi sebagai alat transportasi komersial di laut. Tidak dipersenjatai pada waktu digunakan untuk perang, digunakan sebagai kapal pengangkut perbekalan, kapal rumah sakit atau pembawa pasukan.
7. Kapal Penumpang : Kapal yang khusus dibangun untuk pengangkutan penumpang.
8. Kapal Barang dan Kapal barang yang dapat menyediakan penumpang akomodasi lebih dari 12 orang penumpang.
9. Kapal Curah : Kapal yang khusus dibangun untuk mengangkut muatan curah (tanpa) kemasan, baik dalam bentuk cair seperti kapal-kapal tanker untuk pemuatan minyak mentah atau yang sudah diolah, kapal tanker LNG atau LPG dan kapal tanker yang mengangkut bahan-bahan kimia cair. Kapal curah kering

seperti kapal mengangkut biji-bijian tambang atau biji-bijian aeteri Gandum (*grain*).

10. Kapal *Container* : Kapal yang dibangun khusus untuk mengangkut barang-barang di dalam peti kemas (*container*), ada yang *full container* ada yang *semi- container*.
11. Kapal Ro-Ro : Kapal yang dibangun sedemikian rupa (Roll on Roll off) sehingga dapat memuat dan membongkar muatannya dengan me-*roll* di atas roda-roda.
12. Kapal-kapal khusus : ialah kapal-kapal yang karena sifat pekerjaannya dibangun dan dilengkapi sesuai dengan kebutuhan operasionalnya. Contohnya adalah Kapal keruk, kapal tunda, kapal pemadam kebakaran, kapal pengeboran, kapal anti ranjau.



B. Kegiatan Belajar

1. Tujuan Pembelajaran

- a) Melalui kegiatan pembelajaran ini siswa diajak untuk mengenal, mengetahui dan memahami jenis-jenis kapal dan kegunaannya dalam bahasa Inggris.
- b) Selanjutnya siswa diajak untuk lebih dalam memahami peristilahan *Maritime English* secara praktis dalam hal *vocabulary* yang menyangkut Kapal dan jenis-jenisnya.

2. Uraian Materi

Pada bagian ini coba anda baca, cermati dan perhatikan dengan seksama naskah dibawah ini. Teks berikut adalah penjelasan singkat mengenai "***Types of the Ships***".

- **BULK CARRIERS**

Bulk carriers, or just bulkers, are ships especially designed to carry loose goods in bulk. The cargo transported in bulk commonly includes wood, coal, ore, grain, coke, fertilisers, cement, light minerals, sugar and sand. Bulkers usually have one deck, with the engine room in the stern and a deckhouse above it. Holds are constructed with longitudinal and cross walls, called bulkheads. Cargo in bulk is easily stowed in between them. Bulk cargo ships are not equipped with any handling gear, except for handy size ones, up to 30,000 tons of deadweight. All loading and unloading is done by means of shore devices like grabs or suction pipes. Some of them make use of flexible ductings and fans, which simply blow light cargo into holds. Port devices may include special conveyors that drop cargo inside. When one hold is full, loading is continued into the next one. Bulk carriers have large upper and lower ballast tanks to provide enough draught. Some bulk carriers are

designed to function also as tankers. Such vessels are called Ore Bulk Oil (OBO) carriers.



- **CABLE-LAYING SHIPS**

Cable-laying vessels, also called cable layers, are specially designed for laying and repairing telegraph and telephone cables across vast water areas like channels, seas and oceans. Modern cable layers are as efficient in repair and maintenance operations as in long-haul cable laying. The internet boom together with the extraordinary expansion of telecommunication has led to the growing demand for vessels specialising in laying sub-sea optical fibre networks. “The Cable Innovator” seems to be the largest vessel operating in this market. The ship was built by Kvaerner Masa Yards in Finland. All cable-laying operations are carried over the stern, so the vessel can maintain a high speed and is not slowed down during cable work. Moreover, it can operate successfully in extreme weather conditions. It has been designed to deploy a remotely operated vehicle (ROV). The vehicle is connected to the ship via communication tether. The most important cable handling equipment aboard “The Cable Innovator” is the electrically operated cable laying drum with various tension devices. The drum diameter is 4m long and has fixed-angle fleeting rings and blades for controlling the cable work. It is equipped with a special A-frame for handling the plough used for cable burial in the seabed. Furthermore, “The Cable Innovator” is equipped with an echo sounder and devices for measuring the length of the cable laid out. While laying cables, all main data are monitored, logged and printed out as a quality control. The control system can also display all data accounting for the tension of the plough tow cable when the vessel operates and can activate the alarm in case the cable tension gets too high.



Images of cable-laying ships from googleimages.com

The vessel automatically reduces its speed. When buried safely beneath the sea bed, the fibre optic communication cables constitute a vital part of our global telecommunication network.

- **CAR CARRIERS**

The “Elbe Highway” is the first of the series of four innovative PCTC (Pure Car and Truck Carrier) Ro-Ro car carriers built in Gdynia Shipyard S.A., Poland, for long-term charter for Kawasaki Europe. The shipyard design office team initiated and accomplished all the concept work on these new vessels. Along the way they were able to put into practice the yard’s considerable experience in the field. The delivery ceremony was held on 20th August 2005, exactly nine months after the commencement of steel cutting. The second ship, the “Thames Highway”, exactly replicating the design of the prototype, was completed by the end of 2005. The largest car carriers of today can handle over 6000 units. The “Elbe Highway”, with her overall length (LOA) of 143 m and breadth (B) of 25 m, can carry up to 2100 units, so the total car deck capacity is comparatively small. In fact, she can be classified as the only vessel ever designed and built expressly for carrying vehicles. The intention was to follow the innovative approach to world car

transport. The crucial idea is to lower the cost of the port stay by means of employing smaller cargo ships, operating as feeders.

The vessel is constructed with two hydraulically-operated external stern ramps. One is a straight stern ramp, another one is a quarter stern ramp. Each of them has a safe working load of 70 tons and a 6-metre long driveway. All vehicles ranging from passenger cars to heavy movable machinery can be loaded and discharged through these two ramps. For PCTC carriers, a stern quarter ramp offers considerable advantages for cargo access and handling. Its main benefit is that it allows the vessel to berth in the normal manner, that is alongside the quay, without the need for special shore facilities. The motor vehicles carried by the “Elbe Highway”, and later on by her three sisters, can be handled at any port in the world, not only at Ro-Ro terminals with trailer quays. The carrier is built with eight cargo decks in total. Two of them are liftable car decks. They enhance greatly the operational flexibility of the vessel. Unlike hoistable car decks, they have no integral lifting mechanism, but are deployed by a mobile deck lift. Thus, the maintenance requirements of each of the panels forming the movable decks are limited.

The arrangement of internal ramps and fixed car decks follows the main design concept to shorten the time in port. Namely, deck supporting pillars have been designed off the ship centre line, making the construction not symmetrical, but allowing for better cargo access. The “Elbe Highway” has been classified by DNV as ICE-1A as the hull is strengthened in her underwater and bow sections. The navigating bridge is fully glass-shielded to improve the navigation visibility on icy waters. The prototype carrier has already joined the growing fleet of high-quality car carriers of high manoeuvrability and efficiency that are operating on short routes in the Baltic and North Sea regions.



- **CONTAINERSHIPS**

These ships carry cargo in containers. Goods are locked and sealed in huge boxes of standard size. Containerships carry containers both in holds and on the main deck. In the holds, there is a special cellular structure of guide rails where containers are stowed one on the top of another. That is why they can be also called cellular vessels. These ships usually have one deck, with the machinery spaces located towards the aft end. Additional containers are stowed on open deck and anchored in place by wire ropes. Containerships have produced a revolution in water transport. The higher speed of around 26 knots is their main advantage over other cargo ships. In addition, the loading and unloading work with the use of shore based moving gantry cranes is extremely fast. The primary advantage of the use of containers is the possibility of transporting cargo directly from customer to customer, not only from port to port. Container vessels have grown in capacity up to 8000 TEU. Large container vessels usually do not have their own loading gear. However, small, or medium-sized ones, called container

feeders, are often equipped with cargo gear. Also, some multipurpose ships can operate as container feeders.

- **INDUSTRIAL SHIPS**

Industrial ships are designed to carry out industrial processes at sea, like drawing out raw materials and food resources from waters. The activities that take place aboard these ships include extracting oil and mineral salts, or catching and processing fish and crustaceans like crabs, shrimps and lobsters. Thus, if we consider the function the ships perform, we can clearly distinguish between the extractive and processing ships. The first type includes trawlers and seiners.

A trawler is the most popular vessel among fishing ships. Its name comes from the name of the activity, 'trawling', which means catching fish by dragging a fishing net along the sea bed. The trawl can be launched either over the ship side or over the stern. Spain and Norway have been taking the lead with respect to the number, size and the variety of trawlers built.

Non-trawling vessels can range from simple crafts which deploy a net, to fishing vessels that first lay out nets, even for a distance of a few kilometres, and then wait for the shoal of fish to swim into it. The typical representatives are seiners, tuna clippers and crab boats. A seiner makes use of a special kind of net called a seine net in the following way: the net hangs vertically in water. Its top edge floats and its bottom is weighted and equipped with a rope. When a shoal of fish swims into the net, the rope tightens and closes around it. Processing ships receive fish or other sea goods from extractive ships, process them into products, and bring them to ports. They must be fitted with special machines for processing, canning and storing.

Pay attention to the word forms with -ing ending. You can easily notice that all of them have been highlighted in the reading above. All the underlined word forms can fall into the following grammar groups and can function:

- as a part of any continuous tense form. Examples:
 - He is fishing.
 - They will be catching whales.
 - The ship has been sailing for three months.
- as an adjective, describing causes of people's feelings and features of things and objects. Examples:
 - Racing yachts can sail very fast.
 - Titanic was an amazing ship.
 - Fishing boats are very popular in Iceland.
- as a gerund, which is a noun derived from a verb and describes an activity and always has the same function as a noun (although it looks like a verb), so it can also be used as a subject of a sentence. Examples:
 - Hunting whales is wrong.
 - Catching sea mammals is prohibited in some areas.
 - Commercial fishing must be legal.

- **TANKERS**

Tankers are vessels designed for carrying any liquid cargo such as petroleum and products derived from it, liquefied gases, chemicals, wine and water. There are gas tankers designed for carrying liquefied gas, either LPG or LNG, both of which need to be kept at higher pressure and at low temperatures to maintain the cargo in a liquefied state, and there are crude oil tankers. The latter usually carry crude oil from a loading port near oil fields or from the end of a pipeline to a refinery.

Gas tankers are often steam turbine ships. The boil-off, which is the gas evaporated from the cargo in order to keep the temperature low, can be used as fuel for the boilers. Tankers come in all sizes, ranging from bunkering tankers of 1000 DWT used for refueling larger vessels to the real giants:

- the VLCC – Very Large Crude Carrier , 200,000 – 300,000 DWT
- the ULCC – Ultra Large Crude Carrier , over 300,000 DWT

Crude oil tankers are the largest of all cargo ships. Their capacity has risen right up to 500,000 tons and, consequently, their large draught limits their sailing routes. There are only a few ports that supertankers can enter and thus they are mostly loaded and unloaded from off-shore pumping stations. The liquefied cargo is loaded by means of pipes from shore facilities and through flexible pipelines mounted on the jetty.

A further step in the development of the oil industry is the Floating, Production, Storage and Offloading vessel (FPSO), designed for off-shore purposes. When a large vessel like a crude oil tanker is damaged by collision or grounding, vast amounts of oil may leak out straight into the sea. This explains the strict requirement for them to have a double hull.



Tanker ship from googleimages.com

a. Reading

The following passage is about different types of merchant ship. Before you read the passage, write down on a piece of paper the names of any type of merchant ship you know. 7J Try to divide your ships into groups based on the type of cargo they carry (e.g. passenger ships, liquid cargo ships). Now read the passage.

¹Merchant ships can be classified according to what they carry. ²Most are designed to carry cargo, but a few still carry passengers.

³Cargo ships can be divided into two basic types. ⁴One type carries dry cargo, the other carries liquid cargo. ⁵Multi-deck vessels are a traditional type of dry cargo ship. ⁶Their holds are divided horizontally by one or two 'tween decks. ⁷Dry bulk cargo is carried in bulk carriers. ⁸These do not have 'tween decks. ⁹Container ships are the most modern type of dry cargo carrier. ¹⁰They carry containers of standard dimensions. ¹¹Fruit, meat and dairy produce are carried in refrigerated ships. ¹²Oil tankers are the most common type of liquid cargo carrier. ¹³They are often very large. ¹⁴Two other types of liquid bulk carrier of growing importance are liquefied natural gas (LNG) carriers and chemical carriers.

¹⁵In comparison with cargo vessels, passenger ships are fewer in number and type. ¹⁶Passenger liners are the traditional type of passenger ship. ¹⁷Nowadays their number has been greatly reduced. ¹⁸Cruise ships are another type of passenger vessel. ¹⁹These are often converted passenger liners. ²⁰Ferries are the

most common type of passenger vessel. ²¹Many of them are also designed to carry vehicles.

Were any of the ships that you had thought of mentioned here?

b. Grammar

Here are some more connecting words for joining statements: **because, herefore, however**. *Study how they are used in these examples:*

1. **Because** gives the reason or cause
 - (a) Multi-deck vessels have 'tween decks.
 - (b) 'Tween decks help stowage.(a) + (b) Multi-deck vessels have 'tween decks **because** these help stowage.

2. **Therefore** expresses consequence or result
 - (a) Ships are designed for many purposes.
 - (b) Their type and size vary considerably.(a) + (b) Ships are designed for many purposes, **therefore** their type and size vary considerably.

3. **However** introduces a qualification or concession
 - (a) Passenger liners carry passengers.
 - (b) Some carry a large amount of cargo as well.(a) + (b) Passenger liners carry passengers; **however**, some carry a large amount of cargo as well.

Now join these pairs of sentences using because, therefore, however, as appropriate:

- a) Multi-deck vessels usually carry general cargo.
Some carry containers as well.
- b) Passenger liners have high superstructures.

- They need a large number of decks.
- c) Many ferries are designed to carry vehicles.
They have doors at the bows or stern.
- d) Cargo ships are usually designed to carry dry or liquid cargo.
OBO (oil, bulk ore) ships are designed to carry both.
- e) Bulk carriers carry large quantities of loose cargo.
They have large unobstructed holds.
- f) Passenger liners often operate as cruise ships for part of the year.
There is not always enough business for them on liner routes.

Here are some more connecting words: **although, consequently, as.**

Study the examples and decide if they introduce a clause of (1) reason or cause, (2) consequence or result, (3) qualification or concession.

- (a) Cargo liners sail on fixed routes and keep to a timetable, **consequently** some are designed to carry a few passengers.
- (b) Bulk carriers do not usually carry derricks **as** loading and unloading is done by special cranes.
- (c) **Although** tankers sail on fixed routes, they do not carry passengers.

Your answers should have been:

- (a) consequence or result
(b) reason or cause
(c) qualification or concession

Read through this development of the reading passage in Reading Comprehension (A) and circle the words and phrases which the words underlined refer to. Note that when a singular noun is used with the definite article to refer to a class of objects, it is usually followed by a plural pronoun.

'Merchant ships can be classified according to what they carry. 'Most are designed to carry cargo, but a few still carry passengers.

³Cargo ships can be divided into two basic types. ⁴One type carries dry cargo, the other carries liquid cargo; however, an OBO ship is designed to carry both. ⁵A traditional dry cargo ship is the multi-deck vessel. 'Her holds are divided horizontally by one or two 'tween decks, because these make stowage of individual packages easier. 'Dry bulk cargo is carried in bulk carriers. 'These do not have 'tween decks as cargo is carried loose. ⁹The most modern type of dry cargo carrier is the container ship. 'They carry containers of standard dimensions, consequently stowage is easier. "Fruit, meat and dairy produce are carried in refrigerated ships. "Oil tankers are the most common type of liquid cargo carrier. ¹³They are often very large, because huge quantities of oil need to be transported and one large vessel is more economical to operate than two smaller ones. ¹⁴"Two other types of liquid bulk carrier of growing importance are the liquefied natural gas (LNG) carrier and the chemical carrier, although chemicals can also be carried in drums in general cargo ships.

¹⁵In comparison with cargo vessels, passenger ships are fewer in number and type. "The traditional passenger ship is the passenger liner; however, many carry cargo as well. "Nowadays their number has been greatly reduced, because of competition from air transport. '¹⁶Another type of passenger vessel is the cruise ship. '¹⁹These are similar in appearance to passenger liners. ²⁰The most common type of passenger vessel is the ferry. ²¹ Many of them are also designed to carry vehicles, therefore these have doors at the stern or bows.

Using the information in the passage and the connecting words studied in Grammar (B), carry out the following instructions:

- (a) add a **qualification** to this statement:
Cargo ships carry either liquid or dry cargo.
- (b) add a **reason** to this statement :
Multi-deck vessels have 'tween decks.
- (c) add a **consequence** to this statement :
Containers are of standard dimensions.
- (d) add **two reasons** to this statement:
Oil tankers are often very large.
- (e) add a **qualification** to this statement :
Chemicals are carried in chemical carriers.
- (f) add a **qualification** to this statement:
Passenger liners are designed to carry passengers.
- (g) add a **consequence** to this statement: Many ferries carry vehicles.

When we qualify a statement we often add a reason.

Use your imagination and knowledge to answer these questions:

- (a) Why are OBO ships designed to carry both liquid and dry cargo?
- (b) How do 'tween decks help stowage of cargo?
- (c) Why is it more economical to run one large tanker than two smaller ones?
- (d) Why do general cargo ships sometimes carry chemicals?
- (e) Why do passenger liners also carry cargo?

c. Vocabulary

Symbols, Omissions

Symbols are also used to cut down the amount of writing needed in note-taking. Many of these are used in mathematics.

Study these symbols and their meanings.

= : is, are, has, have, equals

∴ : therefore, consequently, thus, so

∵ : because, as, since.

Note also how one abbreviation can be used for words of similar meaning:

but: however, (al)though.

The words which are written down in note-taking, either in full or in abbreviated form, are only those words which carry information that is relevant. All other words can be omitted. The groups of words which we tend to omit when taking notes are listed below:

1. Auxiliaries **be** (am, is, are, was, were), **have** (have, has, had), **do** (do, does, did)
2. Articles the, an, a, some
3. Pronouns he, ', his, himself etc., that, which, etc.
4. Prepositions of time, direction, place, and when attached to verbs, adjectives and nouns.

(Note: The above list is only a guide and the note-taker must make up his own mind as to what can be left out either because it is not important or because it can be added when the notes are expanded.)

Mengasosiasi - Mengkomunikasi

Buatlah catatan dan kesimpulan dari hasil pengamatan, diskusi dan eksplorasi yang telah anda lakukan, lalu sampaikan dalam kelas hasil pengamatan anda!

3. Refleksi

Setelah mengikuti kegiatan pembelajaran ini, masing-masing siswa harus mampu menuliskan secara deskriptif atau naratif tentang beberapa hal dibawah ini. *(Gunakan kertas tambahan atau lembar terpisah, apabila perlu)*

1. Apakah anda merasakan manfaat dari pembelajaran ini? Jika Ya, sebutkan apa saja manfaatnya? Jika Tidak, berikan penjelasan?

2. Apa rencana implementasi pengetahuan dan keterampilan dari hasil kegiatan pembelajaran ini.

3. Apa saran dan masukan anda untuk kegiatan pembelajaran selanjutnya.

4. Tugas

Write a brief description of some of the different types of warship.

Stage 1. Combine the sentences in each group below to form short paragraphs. The first sentence in each group is the main statement and stays the same. The other two pairs can be combined to form two sentences using any of the connecting words studied so far.

In the past the largest warships were battleships.
They were designed for heavy bombardment.

They carried up to sixteen-inch guns.
Their speed was relatively slow.
They were large and had heavy armour plating.

Nowadays aircraft carriers are the largest warships.
Most carry aircraft and helicopters.
A few carry helicopters only.
They have a narrow bridge superstructure.
This leaves more room for the flight deck.

Another type of warship is the cruiser.
These are smaller than battleships.
They are larger than destroyers.
They are designed to combine fire-power with speed.
They carry medium-sized guns and missiles.

Stage 2. In the next two groups the order of the sentences has been confused. Choose the main statement and then sort out the other sentences joining them together as appropriate.

These are expensive to run.
They are built for speed and manoeuvrability.
They may have diesel engines for cruising.
They are often powered by gas turbines.
Patrol boats vary greatly in design.

It carries guided missiles in addition to conventional guns.
Many frigates have an anti-submarine role.
Destroyers and frigates are designed for escort duties.
They carry weapons for destroying submarines.
The modern destroyer is taking over the role of the cruiser

5. Tes Formatif

There are several types of ship working round ports and channels which are designed to do special jobs to help ship and shipping. Some of these are briefly described in this lecture.

One very useful type of vessels is the tug. Tugs can be divided into four basic types. Some are designed as river tugs for work on rivers. Others are designed as harbour tugs and help ships in and out of ports and harbours. Two other types of

the tug, which are of growing importance, are coastal tugs and ocean-going tugs. These go out to help ships in difficulty at sea. Tugs must be designed to satisfy three important requirements. They must be stable in all conditions. They must also be manoeuvrable and be powerful enough to move ships of far greater size.

A rather noisy and smaller type of vessel is the dredger. Dredgers are necessary to remove the sand and mud from the beds of channels and harbours. Dredgers are of three main types; they can be either bucket dredgers, which have a series of buckets which go down to the sea bed and scoop up the sand and mud; they can be suction dredgers, which suck up sand and mud like a very large vacuum cleaner; or they can be grab dredgers, which operate like cranes.

Another type of special duty vessel is the icebreaker. Icebreakers are important to shipping because northern ports and channels freeze up in winter. Ships must use these ports all the year around, therefore it is necessary to keep the open. Icebreakers have powerful engines and very strong hulls.

An unusual type of vessel is the lightship. Lightships look like ordinary ships, but they do not have engines because they are towed into position and the anchored there. They not only have light, but also a foghorns, a radio beacon and meteorological equipment as well. Most lightships have a crew of approximately twelve.

A very important type of boat is lifeboat. Lifeboats are of many different types. In the United Kingdom they are manned by volunteers and supported by voluntary donations. Lifeboats must be strong, stable and manoeuvrable and their crew must be well trained.

Finally, there is the pilot launch. Pilot launches are motor boats for transporting pilots to and from ships. They must be seaworthy as pilots go out in all weathers. In the United Kingdom, some port authorities employ their own pilots, but many pilots are employed by Trinity House, which was founded in 1514.

Exercise 1. Expand these notes into full sentences:

1. Tugs - 4 basic types (i) river, (ii) coastal, (iii) harbr, (iv) ocean-going.
2. Dredgers remove sand & mud fro chnls & hrbrs.
3. Icebreakers import ** N ports & chnls frze winter.
4. Lightships look like ord ships BUT no eng ** towd postn & anchrd.
5. Lifeboats - many types. In UK manned by vols & supp by voltry dons.
6. Pilot launches = mtr boats for transport pilots to & fro ships.

*Exercise 2. Try **and** reduce these sentences to note form:*

1. Tugs must be stable in all conditions, manoeuvrable and have sufficient power.
2. Dredgers are of three main types: they can be either bucket dredgers, suction dredgers or grab dredgers.
3. Ships must use these ports all the year round, therefore it is necessary to keep them open.
4. Lightships not only have a light, but also a foghorn, a radio beacon and meteorological equipment.
5. Lifeboats must be strong, stable and manoeuvrable and their crew must be well trained.
6. Pilot launches must be seaworthy as pilots go out in all weathers.

C. Penilaian

1. Sikap

Nilai diperoleh dari pengamatan guru terhadap keaktifan siswa selama proses pembelajaran berlangsung

Lembar Penilaian Sikap

No	Nama	Kriteria Penilaian	Jumlah	Ket.
----	------	--------------------	--------	------

	Siswa	Perhatian (1)	Disiplin (2)	Tekun (3)	Aktif Mendengar dan bertanya (4)	Skor	
1.							
2.							
3.							
Dst							

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

$$\text{Nilai akhir} = \frac{\text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Peserta didik memperoleh nilai :

- a. Sangat Baik (SB) : apabila memperoleh skor 3.66 s.d 4.
- b. Baik (B) : apabila memperoleh skor 2.66 s.d 3.65.
- c. Cukup (C) : apabila memperoleh skor 1.66 s.d 2.65.
- d. Kurang (K) : apabila memperoleh skor < 1.65.

2. Pengetahuan

Nilai diperoleh dari Pengamatan selama proses diskusi kelompok, presentasi dan tes tertulis dan penugasan.

Pedoman penilaian :

$$\text{Nilai akhir} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Nilai untuk Keterampilan menggunakan penilaian kuantitatif 1 – 4 :

Sangat Baik = 4

Baik = 3

Cukup = 2

Kurang = 1

3. Keterampilan

Nilai diperoleh dari penyelesaian tugas (baik individu maupun kelompok) pada saat diskusi dan presentasi (bermain peran/*Role play*).

- a. Rubrik kegiatan Diskusi

No	Nama	Aspek Pengamatan	Jml	Nilai	Ket
----	------	------------------	-----	-------	-----

	Siswa	Kerja sama	Mengkomunikasikan pendapat	Toleransi	Keaktifan	Menghargai pendapat teman	Skor		
1.									
2.									
3.									
4.									
Dst									

Keterangan Skor :

Kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

Keterangan Skor :

$$\text{Nilai} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

a. Rubrik Penilaian Presentasi

No	Nama Siswa	Aspek Penilaian						Σ Skor	Nilai	Ket
		Komuni Kasi	Sistematika penyampaian	Wawasan	Keberanian	Antusias	<i>Gesture</i> dan penampilan			
1.										
2.										
3.										
4.										
5.										
Dst										

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

Keterangan Skor :

$$\Sigma \text{ Skor perolehan}$$

$$\text{Nilai} = \frac{\text{Skor Maksimal}}{\text{Skor Maksimal}} \times 4$$

b. Lembar Pengamatan Bermain Peran

Kelompok /Kelas :

Kegiatan : Bermain peran /*role play*

Tema /KD :

Nama	Aspek Penilaian			Rata-Rata Nilai
	Partisipasi	Penghayatan Peran	Kerjasama	
1.				
2.				
3.				
4.				
5.				
6.				
dst				

Pedoman Penskoran

Aspek Penilaian	Deskripsi	Nilai
Partisipasi	<ul style="list-style-type: none"> • Keterlibatan dalam bermain peran • Peran dari tokoh yang diperankan 	60 – 100
Penghayatan Peran	<ul style="list-style-type: none"> • Penjiwaan terhadap tokoh • Kesesuaian kostum tokoh • Semangat bermain peran 	60 – 100
Kerjasama	<ul style="list-style-type: none"> • Membantu teman • Tenggang rasa dengan teman 	60– 100

Kriteria Pencapaian Kompetensi /Ketuntasan Belajar

Aspek				
Pengetahuan 1-4	Predikat	Keterampilan 1-4	Predikat	Sikap SB/ B/ C/ K
Keterangan		KKM Pengetahuan dan Keterampilan KKM \geq 2.66 KKM Sikap : Baik		

Bila tingkat pencapaian kompetensi anda mencapai KKM > 2.66, maka anda dinyatakan tuntas dan dapat melanjutkan ke kegiatan belajar selanjutnya. Tetapi apabila tingkat pencapaian kompetensi anda mencapai KKM < 2.66 maka anda dinyatakan belum tuntas, maka anda harus mengulangi mulai dari kegiatan belajar, terutama pada bagian yang masih belum anda kuasai.

Kegiatan Pembelajaran 3 : Shipping

A. Deskripsi



Beraktifas di atas kapal dalam rangka melaksanakan pekerjaan memang bukan hanya sekedar melakukan aktifitas biasa tanpa membutuhkan pengetahuan khusus. Akan tetapi, dalam dunia maritim sebagai bidang yang memiliki kekhususan, penggunaan bahasa secara spesifik menjadi sangat penting. Hal ini disebabkan oleh keberadaan peristilahan yang khusus pada dunia maritim dan perkapalan yang berlaku secara Internasional.

Shipping atau secara sederhana dapat diartikan sebagai aktifitas di kapal merupakan kegiatan yang berlangsung dalam dunia maritim dan perkapalan. Hal ini memperlihatkan tentang segala yang menyangkut peristilahan, kosakata, tata bahasa dan simbol-simbol tertentu dalam dunia profesional maritim, perkapalan dan perikanan.

B. Kegiatan Belajar

1. Tujuan Pembelajaran

- a) Melalui kegiatan pembelajaran ini siswa diajak untuk mengetahui aktifitas *shipping*.
- b) Selanjutnya siswa diajak untuk lebih dalam memahami peristilahan *Maritime English* secara praktis dalam hal *shipping* berikut peristilahannya.
- c) Terkait dengan kompetensi grammar, siswa diarahkan untuk mengathui penggunaan kalimat pasif (*passive voice*) yang sering digunakan dalam aktifitas berbahasa Inggris maritim, perikanan dan perkapalan.

2. Uraian Materi

Freight transport is the physical process of transporting commodities and merchandise goods and cargo. The term Shipping originally referred to transport by sea, but is extended in American English to refer to transport by land or air (International English: "carriage") as well. "Logistics", a term borrowed from the military environment, is also fashionably used in the same sense.

Land or "ground" shipping can be by train or by truck (International English: lorry). In air and sea shipments, ground transport is required to take the cargo from its place of origin to the airport or seaport and then to its destination because it is not always possible to establish a production facility near ports due to limited coastlines of countries. Ground transport is typically more affordable than air, but more expensive than sea especially in developing countries like India, where inland infrastructure is not efficient.

Shipment of cargo by trucks, directly from the shipper's place to the destination, is known as a door to door shipment and more formally as multimodal transport.

Trucks and trains make deliveries to sea and air ports where cargo is moved in bulk.

Much shipping is done aboard actual ships. An individual nation's fleet and the people that crew it are referred to as its merchant navy or merchant marine. Merchant shipping is the lifeblood of the world economy, carrying 90% of international trade with 102,194 commercial ships worldwide. On rivers and canals, barges are often used to carry bulk cargo.

A cargo ship or freighter is any sort of ship or vessel that carries cargo, goods, and materials from one port to another. Thousands of cargo carriers ply the world's seas and oceans each year; they handle the bulk of international trade. Cargo ships are usually specially designed for the task, often being equipped with cranes and other mechanisms to load and unload, and come in all sizes. Today, they are almost always built of welded steel, and with some exceptions generally have a life expectancy of 25 to 30 years before being scrapped.

Terms of Shipment

Common trading terms used in shipping goods internationally include:

- Free on board (FOB)—the exporter delivers the goods at the specified location (and on board the vessel). Costs paid by the exporter include load, lash, secure and stow the cargo, including securing cargo not to move in the ships hold, protecting the cargo from contact with the double bottom to prevent slipping, and protection against damage from condensation. For example, "FOB JNPT" means that the exporter delivers the goods to the Jawahar Lal Nehru Port, India, and pays for the cargo to be loaded and secured on the ship. This term also declares that where the responsibility of shipper ends and that of buyer starts. The exporter is bound to deliver the goods at his cost and expense. In this case, the freight and other expenses for outbound traffic are borne by the importer.

- Carriage and freight (now known in the US as "cost and freight")(C&F, CFR, CNF): Insurance is payable by the importer, and the exporter pays all expenses incurred in transporting the cargo from its place of origin to the port/airport and ocean freight/air freight to the port/airport of destination. For example, C&F Los Angeles (the exporter pays the ocean shipping/air freight costs to Los Angeles). most of the governments ask their exporters to trade on these terms to promote their exports worldwide such as India and China. Many of the shipping carriers (such as UPS, DHL, [FedEx](#)) offer guarantees on their delivery times. These are known as GSR guarantees or "guaranteed service refunds"; if the parcels are not delivered on time, the customer is entitled to a refund.



- Carriage, insurance and freight (now known in the US as "cost, insurance and freight") (CIF): Insurance and freight are all paid by the exporter to the specified location. For example, at CIF Los Angeles, the exporter pays the ocean shipping/air freight costs to Los Angeles including the insurance of cargo. This also states that responsibility of the shipper ends at the Los Angeles port.

- The term "best way" generally implies that the shipper will choose the carrier who offers the lowest rate (to the shipper) for the shipment. In some cases, however, other factors, such as better insurance or faster transit time will cause the shipper to choose an option other than the lowest bidder.

a. Grammar

Passive Voice

The passive voice is a specific grammatical construction; not every expression that serves to take focus away from the performer of an action is classified as an instance of passive voice. The essential components of the English passive voice are a form of the auxiliary verb *be* (or sometimes *get*), and the past participle of the main verb denoting the action. For example:

... that all men **are created** equal...

We **have been** cruelly **deceived**.

The captain **was struck** by a missile.

I **got kicked** in the face during the fight.

Reasons for using the passive voice

The passive voice can be used without referring to the agent of an action; it may therefore be used when the agent is unknown or unimportant, or the speaker does not wish to mention the agent.

- Three stores were robbed last night. (the identity of the agent may be unknown)
- A new cancer drug has been discovered. (the identity of the agent may be unimportant in the context)
- Mistakes have been made on this project. (the speaker may not wish to identify the agent)

The last sentence illustrates a frequently criticized use of the passive – the evasion of responsibility by failure to mention the agent (which may even be the speaker himself).

Agentless passives are common in [scientific writing](#), where the agent may be irrelevant:

- The mixture was heated to 300°C.

However the passive voice can also be used together with a mention of the agent, using a *by*-phrase. In this case the reason for use of the passive is often connected with the positioning of this phrase at the end of the clause (unlike in the active voice, where the agent, as subject, normally precedes the verb). Here, in contrast to the examples above, passive constructions may in fact serve to place emphasis on the agent, since it is natural for information being emphasized to come at the end:

- Don't you see? The patient was murdered **by his own doctor!**

In more technical terms, such uses can be expected in sentences where the agent is the [focus](#) (*comment, rheme*), while the patient (the undergoer of the action) is the *topic* or *theme*. There is a tendency for sentences to be formulated so as to place the focus at the end, and this can motivate the choice of active or passive voice:

- My taxi hit an old lady. (the taxi is the topic, the lady is the focus)
- My mother was hit by a taxi. (the mother is the topic, the taxi is the focus)

Similarly, the passive may be used because the noun phrase denoting the agent is a long one (containing many [modifiers](#)), since it is convenient to place such phrases at the end of a clause:

- The breakthrough was achieved by Burlingame and Evans, two researchers in the university's genetic engineering lab.

In some situations, the passive may be used so that the most dramatic word, or punchline, appears at the end of the sentence.

[Subject + be (tobe) + V3]

The Subject is commonly formed by NOUN or PRONOUN. While the 'tobe' depends on the tenses of the grammar form, such as is, am, are (*present*); was, were (*past*); being; (*progressive*); been (*perfect*); been being (*perfect progressive*).

The Verb is defined as the word of action. It comprises to REGULAR VERBS and IRREGULAR VERBS.

*Are the sentences written in **ACTIVE** or **PASSIVE**?*

1. Steven likes to play baseball.
2. Bingo is played in Britain.
3. He lost his keys yesterday.
4. A letter was written.
5. They listen to their music.
6. They often read e-mails.
7. These cars are produced in Italy.
8. French is spoken in Niger.
9. Lots of houses were destroyed.
10. The bus driver was hurt.
11. Columbus discovered America.
12. A dog bites Steven.
13. Indonesia was colonized by Dutch and Japan.
14. Daddy read a newspaper last night.
15. Smoking is not allowed in this area.
16. Riska put the book on the table yesterday.

Make **PASSIVE FORMS** from the given phrases. Mind the tenses in the brackets.

1. English – to speak (simple present)
2. Films – to watch (simple present)
3. Posters – to make (simple present)
4. Stories – to tell (simple present)
5. Computer games – to buy (simple present)
6. Books – to write (simple past)
7. Volleyball – to play (simple past)
8. Song – to sing (simple past)
9. Skateboards – to ride (simple past)
10. A prize – to win (simple past)

Furthermore, the passive forms of a verb are created by combining a form of the "to be verb" with the past participle of the main verb. Other helping verbs are also sometimes present: "The measure could have been killed in committee." The passive can be used, also, in various tenses. Let's take a look at the passive forms of "design."

Tense	Subject	Auxiliary		Past Participle
		Singular	Plural	
Present	The car/cars	is	Are	designed.
Present perfect	The car/cars	has been	have been	designed.
Past	The car/cars	was	Were	designed.
Past perfect	The car/cars	had been	had been	designed.
Future	The car/cars	will be	will be	designed.
Future perfect	The car/cars	will have been	will have been	designed.
Present progressive	The car/cars	is being	are being	designed.
Past progressive	The car/cars	was being	were being	designed.

A sentence cast in the passive voice will not always include an **agent** of the action. For instance if a gorilla crushes a tin can, we could say "The tin can was crushed **by the gorilla**." But a perfectly good sentence would leave out the gorilla: "The tin can was crushed." Also, when an active sentence with an indirect object is recast in the passive, the indirect object can take on the role of subject in the passive sentence:

Active	Professor Villa gave <u>Jorge</u> an A.
Passive	An A <u>was given</u> to Jorge by Professor Villa.
Passive	Jorge <u>was given</u> an A.

Only transitive verbs (those that take objects) can be transformed into passive constructions. Furthermore, active sentences containing certain verbs cannot be transformed into passive structures. *To have* is the most important of these verbs. We can say "He has a new car," but we cannot say "A new car is had by him." We can say "Josefina lacked finesse," but we cannot say "Finesse was lacked." Here is a brief list of such verbs*:

Resemble	look like	equal	agree with
Mean	contain	hold	comprise
Lack	suit	fit	become

The auxiliary verb of the passive voice (*be* or *get*) may appear in any combination of **tense, aspect and mood**, and can also appear in **non-finite** form (infinitive, participle or gerund). Notice that this includes use of the verb *be* in **progressive aspect**, which does not normally occur when *be* is used as a simple **copula**. Some examples:

- The food **is being served**. (present progressive passive)
- The stadium **will have been built** by next January. (future perfect passive)

- **I would have got injured** if I had stayed in my place. (conditional perfect passive with *get*)
- It isn't nice **to be insulted**. (passive infinitive)
- **Having been humiliated**, he left the stage. (passive present participle, perfect aspect)

In an “active voice” the subject performs the action:

“I help him”.

In a “passive voice” the subject does not perform any action, but undergoes the action - something happens to the subject:

“He is helped by me”.

Mengasosiasi - Mengkomunikasi

Buatlah catatan dan kesimpulan dari hasil pengamatan, diskusi dan eksplorasi yang telah anda lakukan, lalu sampaikan dalam kelas hasil pengamatan anda!

a. Reading

Read this report and answer the question



On July 18, 2006, the cruise ship Crown Princess left Port Canaveral, Florida. One hour after leaving harbour the vessel's automatic steering system began a turn to port. The Second Officer disengaged the automatic mode. He took manual control of the steering. He turned the wheel first to port and then to starboard. He did this several times. This caused the vessel to list to port and starboard at angles of 24°. The movement of the ship threw passengers and crew about and many were hit and injured by flying objects. The vessel's structure was not damaged.

- 1) What was the approximate position of the Crown Princess?
- 2) Who was in command of the ship?
- 3) Why did the ship list?
- 4) What caused injuries to passengers and crew?
- 5) How much damage was done to the ship?

Read this technical information, and answer the questions.

The shaft always spins in the same direction whether going forward or backward. At 0–12 kts shaft rotates at 55 RPM. Thrust is controlled by changing the pitch of the blade. >12 kts thrust is controlled by changing the RPM of the shaft.

- 1) What is a suitable title for what you have just read?
 - a) Ship speeds
 - b) Propellers
 - c) Types of ships
- 2) Which statement is correct?
 - a) When going backwards the shaft spins forwards.
 - b) The shaft spins in two directions.
 - c) The shaft spins only one way.
- 3) Which of these statements is wrong?
 - a) The speed of a ship can be controlled by the pitch of the blade.
 - b) Slow ship speed is controlled by the shaft.
 - c) High speeds are controlled by the speed the shaft turns.

3. Refleksi

Setelah mengikuti kegiatan pembelajaran ini, masing-masing siswa harus mampu menuliskan secara deskriptif atau naratif tentang beberapa hal dibawah ini. *(Gunakan kertas tambahan atau lembar terpisah, apabila perlu)*

1. Apakah anda merasakan manfaat dari pembelajaran ini? Jika Ya, sebutkan apa saja manfaatnya? Jika Tidak, berikan penjelasan?

2. Apa rencana implementasi pengetahuan dan keterampilan dari hasil kegiatan pembelajaran ini.

3. Apa saran dan masukan anda untuk kegiatan pembelajaran selanjutnya.

4. Tugas

*Rewrite the **ACTIVE** sentences into **PASSIVE***

1. They understand Spanish.
2. My friend brought a new car.
3. John cleaned the bathroom.
4. The teacher closes the window.
5. The girls can play handball.
6. Our dog did not bite a cat.
7. The mechanic repairs cars.
8. The electricians test the fire alarm.
9. Levi Strauss invented the blue jeans.
10. Frank takes photos.

*Rewrite the **PASSIVE** sentences into **ACTIVE***

1. The telephone was invented by Alexander Graham Bell.
2. This book was written by an Irishman.
3. The president was elected by the people.
4. The bag was packed by his mother.
5. The child was hit by a car.
6. The exercise is completed by the teacher.
7. The club was founded by Ron and Peggy.
8. Football is played by the children.
9. The computer is used by Patrick.
10. Coffee is sold by Andra.

5. Tes Formatif

Do this quiz to test your knowledge of ship handling.

1. Dead Water is when fresh water lies on top of sea water. How does Dead Water affect the ships?
2. What do you do when you turn a vessel in a narrow space?
 - a) snub round
 - b) drift thrust
 - c) heel
3. When would you use a *Baltic Moor*?
 - a) In the Baltic Sea
 - b) At a beach
 - c) At a weak quay
4. What causes a ship to *squat*?
 - a) shallow water
 - b) high speed
 - c) heavy cargo
5. What is *bank suction* and where does it happen?

Change the following sentences to passive voice (Simple Present)

Example: He sends the parcels every day.

The parcels are sent every day.

1. That man cleans the school every day.

2. The postman delivers the letters every day.

3. The conductor checks our tickets.

4. They publish new books every year.

5. My father washes his car every week.

6. They speak French in this town.

7. Somebody collects the garbage every week.

8. Porters carry suitcases.

9. The police catch criminals.

10. Mr. Smith opens the store at 9 o'clock.

Change the following sentences to passive voice (Simple Past).

Example: They repaired the car.

The car was repaired.

1. My father paid the bill yesterday.

2. Somebody broke the glass.

3. They hanged the murderer.

4. They evacuated the town in six hours. (evacuate: leave, empty)

5. The cat ate the meat while the woman was outside.

6. My grandmother sold her old house last week.

7. Somebody stole my wallet.

8. Some people occupied the embassy yesterday.

9. The soldiers stopped the cars.

10. The police arrested the burglars last night.

C. Penilaian

1. Sikap

Nilai diperoleh dari pengamatan guru terhadap keaktifan siswa selama proses pembelajaran berlangsung

Lembar Penilaian Sikap

No	Nama Siswa	Kriteria Penilaian				Jumlah Skor	Ket.
		Perhatian (1)	Disiplin (2)	Tekun (3)	Aktif Mendengar dan bertanya (4)		
1.							
2.							
3.							
Dst							

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

$$\text{Nilai akhir} = \frac{\text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Peserta didik memperoleh nilai :

- a. Sangat Baik (SB) : apabila memperoleh skor 3.66 s.d 4.
- b. Baik (B) : apabila memperoleh skor 2.66 s.d 3.65.
- c. Cukup (C) : apabila memperoleh skor 1.66 s.d 2.65.
- d. Kurang (K) : apabila memperoleh skor < 1.65.

2. Pengetahuan

Nilai diperoleh dari Pengamatan selama proses diskusi kelompok, presentasi dan tes tertulis dan penugasan.

Pedoman penilaian :

$$\text{Nilai akhir} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Nilai untuk Keterampilan menggunakan penilaian kuantitatif 1 – 4 :

Sangat Baik = 4

Baik = 3

Cukup = 2

Kurang = 1

3. Keterampilan

Nilai diperoleh dari penyelesaian tugas (baik individu maupun kelompok) pada saat diskusi dan presentasi (bermain peran/*Role play*).

a. Rubrik kegiatan Diskusi

No	Nama Siswa	Aspek Pengamatan					Jml Skor	Nilai	Ket
		Kerja sama	Mengkomunikasikan pendapat	Toleransi	Keaktifan	Menghargai pendapat teman			
1.									
2.									
3.									
4.									
Dst									

Keterangan Skor :

Kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

Keterangan Skor :

$$\text{Nilai} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

b. Rubrik Penilaian Presentasi

No	Nama Siswa	Aspek Penilaian						Σ Skor	Nilai	Ket
		Komuni Kasi	Sistematika penyampaian	Wawasan	Keberanian	Antusias	<i>Gesture</i> dan penampilan			
1.										
2.										
3.										
4.										
5.										
Dst										

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

Keterangan Skor :

$$\text{Nilai} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

c. Lembar Pengamatan Bermain Peran

Kelompok /Kelas :

Kegiatan : Bermain peran /*role play*

Tema /KD :

Nama	Aspek Penilaian			Rata-Rata Nilai
	Partisipasi	Penghayatan Peran	Kerjasama	
1.				
2.				
3.				
4.				
5.				
6.				
dst				

Pedoman Penskoran

Aspek Penilaian	Deskripsi	Nilai
Partisipasi	<ul style="list-style-type: none"> • Keterlibatan dalam bermain peran • Peran dari tokoh yang diperankan 	60 – 100
Penghayatan Peran	<ul style="list-style-type: none"> • Penjiwaan terhadap tokoh • Kesesuaian kostum tokoh • Semangat bermain peran 	60 – 100
Kerjasama	<ul style="list-style-type: none"> • Membantu teman • Tenggang rasa dengan teman 	60– 100

Kriteria Pencapaian Kompetensi /Ketuntasan Belajar

Aspek				
Pengetahuan 1-4	Predikat	Keterampilan 1-4	Predikat	Sikap SB/ B/ C/ K
Keterangan		KKM Pengetahuan dan Keterampilan KKM \geq 2.66 KKM Sikap : Baik		

Bila tingkat pencapaian kompetensi anda mencapai KKM > 2.66, maka anda dinyatakan tuntas dan dapat melanjutkan ke kegiatan belajar selanjutnya. Tetapi apabila tingkat pencapaian kompetensi anda mencapai KKM < 2.66 maka anda dinyatakan belum tuntas, maka anda harus mengulangi mulai dari kegiatan belajar, terutama pada bagian yang masih belum anda kuasai.

Kegiatan Pembelajaran 4 : Marine Communication

A. Deskripsi

Komunikasi adalah nilai penting (*important value*) dalam kegiatan pembelajaran Bahasa Inggris Maritim dan Perikanan. Reorientasi kebutuhan para pelaku dan profesional dalam dunia maritim dan perkapalan terhadap perlunya bahasa komunikasi global dan mendunia adalah pertimbangan yang paling utama. Oleh karena itu, sesuai dengan kesepakatan organisasi maritim internasional atau yang lebih dikenal dengan nama *International Maritime Organisation* (IMO), bahasa teknik serta pengantar komunikasi yang digunakan secara internasional adalah Bahasa Inggris. Tentunya bahasa Inggris yang berlaku lebih bersifat teknis, detail dan spesifik. Sehingga mata pelajaran BIMP ini termasuk kedalam kategori Bahasa Inggris untuk tujuan spesifik/khusus/tertentu (*English for Specific purposes*).

Aktifitas diatas kapal dan pelabuhan merupakan *setting* utama dalam *plot* setiap kegiatan pembelajaran Bahasa Inggris Maritim. Artinya, kosakata, terminologi serta ekspresi kebahasaannya pun berada dalam dua dunia, yakni daratan dan lautan. Oleh karena itu, kemampuan praktisi, dalam hal ini para siswa bidang Nautika dan perkapalan, akan sangat menentukan kualitas komunikasi yang terjadi. Terdapat beberapa peristilahan, frase, ungkapan, pelaaan/pengucapan yang berbeda antara bahasa Inggris Maritim dengan bahasa Inggris umum. Untuk itulah materi pelajaran BIMP ini dihadirkan, dengan harapan *learner* dapat lebih memahami secara benar penggunaan bahasa Inggris didunia Kelautan dan Perkapalan yang sesuai dengan kaidah dan standar yang telah diberlakukan oleh dunia maritim Internasional.

B. Kegiatan Belajar

1. Tujuan Pembelajaran

- a) Melalui kegiatan pembelajaran ini siswa diajak untuk mengenal, mengetahui dan memahami komunikasi diatas kapal dan lautan dalam bahasa Inggris.
- b) Selanjutnya siswa diajak untuk mempraktikkan *Maritime English* secara praktis dalam hal *marine communication*.
- c) Konteks gramatika yang akan diperdalam pada kegiatan belajar kali ini adalah siswa mengetahui, mengenal, memahami dan mampu menerapkan AUXILIARY VERBS.

2. Uraian Materi

- a. Grammar

AUXILIARY VERBS

can / could / to be able to.

Examples:

I *can* do it .

I *couldn't* help him.

Can I come in, please?

You *could* be right!

There was a fire, but everybody *was able to* escape

“Can” , “could” and “to be able to” are used to indicate a possibility or an ability.

“Can” is used to ask for permission in a polite way.

“Could” is used to indicate a strong possibility.

“To be able to” is used when there is a particular situation.

Can and could only have one form;
to be able to = am / are / is / was / were + able to.

Exercise.

Fill in: *can('t) / could / am/are/is/was/were + able to.*

1. I have been ill for days, so I come to your party.
2. At first he refused, but later we.....to convince him.
3. When he was young he was very strong. Hework for day without stopping.
4.I borrow your pen, please?
5. We're not sure, but they be telling the truth.
6. It was bitterly cold, so wenot to start the engine without preheating it first.
7. Usually they assist you with it, but not tomorrow.
8. Unfortunately henotto assist you right now.
9. youto avoid the shoal when you entered the strait?
10. you please inform me whether there is a berth available?

must / should (have) / to have to.

Examples:

I *must* do it. / I *have to* do it.

They *have to* get up very early every morning.

We *had to* help him with it yesterday.

He *must not* be late for school.

We *don't have to* get up early tomorrow.

You *should* wear warmer clothes.

I think you *should* go home.

You *should* always be careful in traffic.

“Must” and “to have to” indicate a necessity;
“to have to” is stronger in meaning than “must”;
“to have to” may refer to rules;
“must” does not have a past tense;
the past tense of *to have to* (“had to”) is used as past
tense of *must*.
“don’t have to / doesn’t have to” indicate that there is
no need to do something;
“should” is used in an advice to do something;
“should” is also used to indicate a personal opinion;
“should” is also used to indicate a moral obligation.

Must and should only have one form.
To have to: to have = have / has / had.

Exercise

Fill in: must / should (have) / have to / has to / had to.

1. I’ve lost my keys; Ihave dropped them on my way home.
2. You always follow an instruction given by a VTS-station.
3. He go to hospital, because he had been in an accident.
4. Tomorrow is my day off, so I don’tto go to work.
5. I think you wear a helmet when you enter the hold.
6. He starts working at 7 a.m., so heget up very early.
7. It was a big mistake! Younotentered the fairway without a
lookout.
8. We wait in the roadstead, because our berth was not clear yet.
9. It’s a secret! Younot tell anyone.
10. He still has plenty of time. He be there at 12, so he hurry.

may / might / to be allowed to

Examples:

You *may* not help him. / You are not *allowed* to help him.

We *may* help him / We *are allowed* to help him.

You *may* be right!

He *might* be able to help you.

“May” is used to indicate permission.

(“You *may* not help him with it”.)

“May” and “might” are used to indicate a possibility
(there is no difference between the two).

(“You *may* be right” / “You *might* be right!”)

“To be allowed to” is used to indicate permission.

It is a bit more formal than “may”.

May and might only have one form.

To be allowed to : am / are / is / was / were + allowed to.

Exercise.

Fill in: *may / might / am/are/is/was/were allowed to*

1. Have you lost your keys? You find them in the drawer.
2. We notto enter the port before our berth is clear.
3. Henot to join because he was late.
4. I don't know where she is. Shehave gone home.
5. They to enter, but they had to wear helmets.
6. the vessel to anchor in her present position, or must she proceed to the emergency anchorage?.
7. The operator told us that we.....to wait for high tide.
8. They have to replace the second engineer if he's not well soon.
9. It's a secret! You to tell anyone.
10. He..... have been right when he said that it not

Examples:

I *will* do it tomorrow.

Shall I do it for you?

We *shall* see.

Will they be here in time?

We *will not* (*won't*) be able to be there in time.

Will you open the door for me, please.

I *wouldn't* have done this!

It *would* be nice to spend some time together.

“Will” is used to indicate future .
“Shall” is used to indicate future and may only be used
in the first person singular (“I”) and -plural (“we”).
“Shall” is used in a first-person question
(“*Shall I give you a hand with it?*”).
“Will” can also be used in a polite request.
(“*Will you give me a hand with this, please?*”).
“Would” expresses an imaginary action or situation.
(“*It would be nice!*”)

Shall, will and would only have one form.

Exercise.

Fill in: *shall / will / won't / would*.

1. I help you find your keys?
2. I.....be able to help you tomorrow, because we be closed.
3. The vesselhave sailed out on time if the weather hadn't been that bad.
4. They have to store this type of cargo in refrigerated holds.
5.they be able to discharge the vessel before noon?

6.we try to solve this problem for you?
7. The operator has just told us that we.....have to wait for higher tide.
8. you sign the Mate's Receipt, please.
9. I not proceed through this channel at this speed, if I were you.
10. Theybe able to prevent a collision if they continue to proceed at this dangerous speed.

to do (questions).

Examples:

Where *do* you go to?

Where *does* he work?

Did she go to work yesterday?

Where *did* you see him last?

Do / does / did are followed by the stem of the verb

("go" / "work" / "see")

"Do" is used in the present tense.

("Where do you go to?")

"Does" is used in the present tense third person

singular (he / she / it)

("Where does he work?")

"Did" is used in the past tense

("Where did you see him last?").

Exercise.

to do (questions) - fill in: *do / does / did*.

1. Where you go to? *I went home.*
2. Whatthey alert us for? *They alerted us for an approaching storm.*
3. Where the vessel berth when she is in port? *She berths along the embankment.*
4.they appreciate our assistance? *They appreciate it a lot.*
5.they demand anything from us? *They demanded more money*

6. Where the vessel alter her course? *She altered her course off the west extremity of the island.*
7. What the VTS-station instruct us to do? *The station instructs us to anchor in our present position.*
8. When they receive the Notice of Readiness? *They received it this morning.*
9.the temperature increase or decrease when you open this valve? *The temperature increases.*
10. When.....they overhaul the bilge-pumping arrangement? *They overhaul it every 6 months.*

to do (negations).

Examples:

I *don't* understand why you are so upset.

He *doesn't* work here anymore.

She *didn't* go to work yesterday.

They *didn't* like the way we behaved.

Do not / does not / did not
are followed by the stem of the verb
(*"understand" / "work" / "go" / "like"*)
"Do not / don't" is used in the present tense
(*"I do not understand why you are so upset"*).
"Does not / doesn't" is used in the present tense -
third person singular (*he / she / it*).
(*"He does not work here anymore"*).
"Did not / didn't" is used in the past tense
(*"They did not like the way we behaved"*).

Exercise.

to do (negotiations) - fill in: *don't / doesn't / didn't*.

1. We waited and waited, but theydeliver the cargo that day.
2. I asked him about it, but he want to say anything and left.
3. They expect any ingoing vessels anymore today.
4. The pilotwant to embark, because we have made lee on the wrong side of the vessel.
5. They resume pilotage today before 1200 hrs UTC.
6. We met him again last year, but heremember us anymore.
7.he tell the truth? No, he lied!
8. We agree and we wish to make a complaint.
9. The temperature increase, but decreases when you close this valve.
10. they know what time the vessel will arrive?

b. Subject focus

The IMO SMCP is not intended to provide a comprehensive maritime English syllabus, which is expected to cover a far wider range of language skills to be achieved in the fields of vocabulary, grammar, discourse abilities, etc., than the IMO SMCP could ever manage. However, Part A in particular should be an indispensable part of any curriculum which is designed to meet the corresponding requirements of the STCW Convention 1978 as revised. In addition, Part B offers a rich choice of situations covered by phrases well suited to meet the communication requirements of the STCW Convention 1978 as revised, which mariners are implicitly expected to satisfy.

The IMO SMCP should be taught and learned selectively according to users' specific needs, rather than in its entirety. The respective instruction should be based on practice in the maritime environment, and should be implemented

through appropriate modern language teaching methods. Further communicative features may be summarized as follows:

- avoiding synonyms
- avoiding contracted forms
- providing fully worded answers to "yes/no"-questions and basic alternative answers to sentence questions
- providing *one* phrase for *one* event, and
- structuring the corresponding phrases according to the principle: *identical invariable plus variable*.

Marine Communication Phrases has been compiled:

- to assist in the greater safety of navigation and of the conduct of the ship,
- to standardize the language used in communication for navigation at sea, in port approaches, waterways and harbours, and on board vessels with multilingual crews, and
- to assist maritime training institutions in meeting the objectives mentioned above.

These phrases are not intended to supplant or contradict the International Regulations for Preventing Collisions at Sea, 1972 or special local rules or recommendations made by IMO concerning ships' routing, neither are they intended to supersede the International Code of Signals, and their use in ship's external communications has to be in strict compliance with the relevant radiotelephone procedures as set out in the ITU Radio Regulations. Furthermore, the IMO SMCP, as a collection of individual phrases, should not be regarded as any kind of technical manual providing operational instructions.

The IMO SMCP meets the requirements of the STCW Convention, 1978, as revised, and of the SOLAS Convention, 1974, as revised, regarding verbal communications; moreover, the phrases cover the relevant communication safety aspects laid down in these Conventions.

Use of the IMO SMCP should be made as often as possible in preference to other wording of similar meaning; as a minimum requirement, users should adhere as closely as possible to them in relevant situations. In this way they are intended to become an acceptable safety language, using English for the verbal interchange of intelligence among individuals of all maritime nations on the many and varied occasions when precise meanings and translations are in doubt, as is increasingly evident under modern conditions at sea.

- **Procedure**

When it is necessary to indicate that the IMO SMCP are to be used, the following message may be sent:

"Please use IMO Standard Marine Communication Phrases."

"I will use IMO Standard Marine Communication Phrases."

- **Spelling**

- **Spelling of letters or Alphabets.**

When spelling is necessary, only the following spelling table should be used:

Letter	Code	Letter	Code
A	<u>A</u> lfa	N	Nov <u>e</u> mber
B	<u>B</u> ravo	O	<u>O</u> scar
C	<u>C</u> harlie	P	<u>P</u> apa
D	<u>D</u> elta	Q	Que <u>b</u> ec
E	<u>E</u> cho	R	<u>R</u> omeo
F	<u>F</u> oxtrot	S	<u>S</u> ierra
G	G <u>o</u> lf	T	<u>T</u> ango
H	H <u>o</u> tel	U	<u>U</u> niform
I	<u>I</u> ndia	V	<u>V</u> ictor
J	<u>J</u> uliet	W	<u>W</u> hisky
K	<u>K</u> ilo	X	<u>X</u> -ray
L	<u>L</u> ima	Y	<u>Y</u> ankee
M	M <u>i</u> ke	Z	<u>Z</u> ulu

- **Spelling of digits and numbers**

A few digits and numbers have a **modified** pronunciation compared to general English:

Number	Spelling	Pronunciation
0	Zero	ZEERO
1	One	WUN
2	Two	TOO
3	Three	TREE
4	four	FOWER
5	five	FIFE
6	six	SIX
7	seven	SEVEN
8	eight	AIT
9	nine	NINER
1000	thousand	TOUSAND

- **Message Markers**

In shore-to-ship and ship-to-shore communication or radio communication in general, the following eight Message Markers may be used (also see "**Application of Message Markers**" given in PART A1/6 "Vessel Traffic Service (VTS) Standard Phrases"):

- (i) Instruction
- (ii) Advice
- (iii) Warning
- (iv) Information
- (v) Question

- (vi) Answer
- (vii) Request
- (viii) Intention

- **Responses**

- a. When the answer to a question is in the affirmative, say:
"Yes" followed by the appropriate phrase in full.
- b. When the answer to a question is in the negative, say:
"No ..." followed by the appropriate phrase in full.
- c. When the information requested is not immediately available, say:
"Stand by ..." followed by the time interval within which the information will be available.
- d. When the information requested cannot be obtained, say:
"No information."
- e. When an INSTRUCTION (e.g. by a VTS Station, naval vessel or other fully authorized personnel) or an ADVICE is given, respond if in the affirmative:
"I will/can ..." - followed by the instruction or advice in full; and,
if in the negative, respond:
"I will not/cannot ..." - followed by the instruction or advice in full.
- f. Example: "ADVICE. Do not overtake the vessel to the North of you."
Respond: "I will not overtake the vessel to the North of me."
- g. Responses to orders and answers to questions of special importance both in external and on-board communication are given in wording in the phrases concerned.

Distress, urgency and safety signals

- | | |
|-------------|---|
| a. MAYDAY | to be used to announce a distress message |
| b. PAN PAN | to be used to announce an urgency message |
| c. SECURITE | to be used to announce a safety message |

▪ **Standard organizational phrases**

1. "How do you read (me)?"

a. "I read you ...

bad/one with signal strength one (i.e. barely perceptible)

poor/two with signal strength two (i.e. weak)

fair/three with signal strength three (i.e. fairly good)

good/four with signal strength four (i.e. good)

excellent/five with signal strength five (i.e. very good)

b. When it is advisable to remain on a VHF Channel / frequency, say:

"Stand by on VHF Channel ... / frequency"

c. When it is accepted to remain on the VHF channel / frequency indicated, say:

"Standing by on VHF Channel ... / frequency"

d. When it is advisable to change to another VHF Channel / frequency, say:

"Advise (you) change to VHF Channel ... / frequency"

"Advise(you) try VHF Channel .. / frequency... ."

e. When the changing of a VHF Channel / frequency is accepted, say:

"Changing to VHF Channel ... / frequency"

- **Corrections**

When a mistake is made in a message, say:

"Mistake ..." followed by the word:

"Correction ..." plus the corrected part of the message.

Example: "My present speed is 14 knots - *mistake*.

Correction, my present speed is 12, one-two, knots."

- **Readiness**

"I am/I am not ready to receive your message."

- **Repetition**

a. If any part of the message is considered sufficiently important to need safeguarding, say: "Repeat ..." - followed by the corresponding part of the message.

Example: "My draft is 12.6 repeat one-two decimal 6 metres."

"Do not overtake - repeat - do not overtake."

b. When a message is not properly heard, say:

"Say again (please)."

Numbers

Numbers are to be spoken in separate digits:

"One-five-zero" for 150

"Two decimal five" or

"Two point five" for 2.5

Note: Attention! When rudder angles, e.g. in wheel orders, are given, say:

"Fifteen" for 15 or

"Twenty" for 20, etc.

Positions

- a. When latitude and longitude are used, these shall be expressed in degrees and minutes (and decimals of a minute if necessary), North or South of the Equator and East or West of Greenwich.

Example: "WARNING. Dangerous wreck in position 15 degrees 34 minutes North 061 degrees 29 minutes West."

- b. When the position is related to a mark, the mark shall be a well-defined charted object. The bearing shall be in the 360 degrees notation from true north and shall be that of the position FROM the mark.

Example: "Your position bearing 137 degrees from Big Head lighthouse distance 2.4 nautical miles."

Bearings

The bearing of the mark or vessel concerned is the bearing in the 360 degree notation from north (true north unless otherwise stated), except in the case of relative bearings. Bearings may be either FROM the mark or FROM the vessel.

Example: "Pilot boat is bearing 215 degrees from you."

Note: Vessels reporting their position should always quote their bearing FROM the mark, as described in paragraph 11.2 of this section.

- **Relative bearings**

Relative bearings can be expressed in degrees relative to the vessel's head. More frequently this is in relation to the port or starboard bow.

Example: "Buoy 030 degrees on your port bow."

(Relative D/F bearings are more commonly expressed in the 360 degree notation.)

- **Courses**

Always to be expressed in 360 degree notation from north (true north unless otherwise stated). Whether this is to TO or FROM a mark can be stated.

Distances

To be expressed in nautical miles or cables (tenths of a mile), the unit always to be stated.

Speed

To be expressed in knots:

- a. without further notation, meaning speed through the water; or,
- b. "ground speed", meaning speed over the ground.

Times

Times should be expressed in the 24 hour hours UTC notation; if local time will be used in ports or harbours it should clearly be stated.

- **Geographical names**

Place names used should be those on the chart or in Sailing Directions in use. Should these not be understood, latitude and longitude should be given.

- **Ambiguous words**

Some words in English have meanings depending on the context in which they appear. Misunderstandings frequently occur, especially in VTS communications, and have produced accidents. Such words are:

- a. The conditionals "may", "might", "should" and "could"

- May**

- Do not say: "May I enter the fairway?"

- Say: "QUESTION. Do I have permission to enter the fairway?"

- Do not say: "You may enter the fairway."

- Say: "ANSWER. You have permission to enter the fairway."

- Might**

- Do not say: "I might enter the fairway."

- Say: "INTENTION. I will enter the fairway."

- Should**

- Do not say: "You should anchor in anchorage B 3."

- Say: "ADVICE. Anchor in anchorage B 3."

- Could**

- Do not say: "You could be running into danger."

- Say: "WARNING. You are running into danger."

b. The word "can"

The word "can" describes either the possibility or the capability of doing something. In the IMO SMCP the situations where phrases using the word "can" appear make it clear whether a possibility is referred to. In an ambiguous context, however, say, for example: "QUESTION. Do I have permission to use the shallow draft fairway at this time?" Do not say: "Can I use the shallow draft fairway at this time?" if you are asking for a permission. (The same applies to the word "may").

Note: In all cases the radiotelephone procedures as set out in the ITU Radio Regulations have to be observed.

Mengasosiasi - Mengkomunikasi

Buatlah catatan dan kesimpulan dari hasil pengamatan, diskusi dan eksplorasi yang telah anda lakukan, lalu sampaikan dalam kelas hasil pengamatan anda!

3. Refleksi

Setelah mengikuti kegiatan pembelajaran ini, masing-masing siswa harus mampu menuliskan secara deskriptif atau naratif tentang beberapa hal dibawah ini. *(Gunakan kertas tambahan atau lembar terpisah, apabila perlu)*

1. Apakah anda merasakan manfaat dari pembelajaran ini? Jika Ya, sebutkan apa saja manfaatnya? Jika Tidak, berikan penjelasan?

2. Apa rencana implementasi pengetahuan dan keterampilan dari hasil kegiatan pembelajaran ini.

3. Apa saran dan masukan anda untuk kegiatan pembelajaran selanjutnya.

4. Tugas

1. Pelajari dengan seksama uraian materi tentang *marine Communication*
2. Amati rumus pengucapan *marine communication* yang ada sesuai dengan polanya
3. Lakukan latihan pengucapan *marine communication* yang ada
4. Catat hasil latihan yang anda lakukan

5. Tes Formatif

1. When latitude and longitude are used, these shall be expressed in degrees and minutes (and decimals of a minute if necessary), North or South of the Equator and East or West of Greenwich
 - a. Wreck in position 15 degrees 34 minutes North 061 degrees 29 minutes West."
 - b. Wreck in position 17 degrees 36 minutes North 071 degrees 28 minutes
 - c. Wreck in position 15 degrees 37 minutes North 061 degrees 34 minutes
 - d. Wreck in position 16 degrees 34 minutes North 061 degrees 61 minutes
2. When the position is related to a mark, the mark shall be a well-defined charted object. The bearing shall be in the 360 degrees notation from true north and shall be that of the position FROM the mark.
 - a. Bearing 137 degrees from Big Head lighthouse distance 2.4 nautical miles."
 - b. Bearing 187 from Big Head
 - c. Bearing 175 from london Light House distance 2, 7 nautical miles
 - d. Bearing 177 from Big Head light house dsitance 2,9 nautical miles

3. When a mistake is made in a message, you must say ?
 - a. Pan –pan
 - b. Mistake ..." followed by the word:
 - c. Pan pan
 - d. Dangerous
 - e. SOS

4. When it is accepted to remain on the VHF channel / frequency indicated, you must say?
 - a. Accept....
 - b. You must stand by at Radio
 - c. "Standing by on VHF Channel ... / frequency"
 - d. Standing by on GMDSS

C. Penilaian

1. Sikap

Nilai diperoleh dari pengamatan guru terhadap keaktifan siswa selama proses pembelajaran berlangsung

Lembar Penilaian Sikap

No	Nama Siswa	Kriteria Penilaian				Jumlah Skor	Ket.
		Perhatian (1)	Disiplin (2)	Tekun (3)	Aktif Mendengar dan bertanya (4)		
1.							
2.							
3.							
Dst							

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

$$\text{Nilai akhir} = \frac{\text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Peserta didik memperoleh nilai :

- a. Sangat Baik (SB) : apabila memperoleh skor 3.66 s.d 4.
- b. Baik (B) : apabila memperoleh skor 2.66 s.d 3.65.
- c. Cukup (C) : apabila memperoleh skor 1.66 s.d 2.65.
- d. Kurang (K) : apabila memperoleh skor < 1.65.

2. Pengetahuan

Nilai diperoleh dari Pengamatan selama proses diskusi kelompok, presentasi dan tes tertulis dan penugasan.

Pedoman penilaian :

$$\text{Nilai akhir} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Nilai untuk Keterampilan menggunakan penilaian kuantitatif 1 – 4 :

Sangat Baik = 4

Baik = 3

Cukup = 2

Kurang = 1

3. Keterampilan

Nilai diperoleh dari penyelesaian tugas (baik individu maupun kelompok) pada saat diskusi dan presentasi (bermain peran/*Role play*).

a. Rubrik kegiatan Diskusi

No	Nama Siswa	Aspek Pengamatan					Jml Skor	Nilai	Ket
		Kerja sama	Mengkomunikasikan pendapat	Toleransi	Keaktifan	Menghargai pendapat teman			
1.									
2.									
3.									
4.									
Dst									

Keterangan Skor :

Kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

Keterangan Skor :

$$\text{Nilai} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

b. Rubrik Penilaian Presentasi

No	Nama Siswa	Aspek Penilaian						Σ Skor	Nilai	Ket
		Komuni Kasi	Sistematika penyampaian	Wawasan	Keberanian	Antusias	<i>Gesture</i> dan penampilan			
1.										
2.										
3.										
Dst										

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

Keterangan Skor :

$$\text{Nilai} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

c. Lembar Pengamatan Bermain Peran

Kelompok /Kelas :

Kegiatan : Bermain peran /*role play*

Tema /KD :

Nama	Aspek Penilaian			Rata-Rata Nilai
	Partisipasi	Penghayatan Peran	Kerjasama	
1.				
2.				
dst				

Pedoman Penskoran

Aspek Penilaian	Deskripsi	Nilai
Partisipasi	<ul style="list-style-type: none"> Keterlibatan dalam bermain peran Peran dari tokoh yang diperankan 	60 – 100
Penghayatan Peran	<ul style="list-style-type: none"> Penjiwaan terhadap tokoh Kesesuaian kostum tokoh Semangat bermain peran 	60 – 100
Kerjasama	<ul style="list-style-type: none"> Membantu teman Tanggung rasa dengan teman 	60– 100

Kriteria Pencapaian Kompetensi /Ketuntasan Belajar

Aspek				
Pengetahuan 1-4	Predikat	Keterampilan 1-4	Predikat	Sikap SB/ B/ C/ K
Keterangan		KKM Pengetahuan dan Keterampilan KKM \geq 2.66 KKM Sikap : Baik		

Bila tingkat pencapaian kompetensi anda mencapai KKM $>$ 2.66, maka anda dinyatakan tuntas dan dapat melanjutkan ke kegiatan belajar selanjutnya. Tetapi apabila tingkat pencapaian kompetensi anda mencapai KKM $<$ 2.66 maka anda dinyatakan belum tuntas, maka anda harus mengulangi mulai dari kegiatan belajar, terutama pada bagian yang masih belum anda kuasai.

Kegiatan Pembelajaran 5 : Navigation

A. Deskripsi



Navigasi adalah penentuan posisi dan arah perjalanan baik di medan sebenarnya atau di peta, dan oleh sebab itulah pengetahuan tentang kompas dan peta, radar, GMDSS, *live saving equipment*, dan buku buku publikasi serta teknik penggunaannya haruslah dimiliki dan dipahami. Sebelum kompas ditemukan, navigasi dilakukan dengan melihat posisi benda-benda langit seperti matahari dan bintang-bintang dilangit. Pada jaman sekarang, aktifitas menentukan arah ini tidak lagi menggunakan metode konservatif dengan dilakukan secara manual melalui penglihatan gejala dan tanda alam sebagaimana dicontohkan diatas. Teknologi yang telah berkembang dengan sangat pesat dewasa ini telah memberikan kontribusi besar bagi pelaksanaan kegiatan navigasi, terutama bagi aktifitas navigasi di laut. Diantara peralatan navigasi diatas kapal (laut) yang sekarang digunakan dan sering dijumpai adalah :

1. Peta merupakan

perlengkapan utama dalam pelayaran penggambaran dua dimensi (pada bidang datar) keseluruhan atau sebagian dari permukaan bumi yang diproyeksikan



dengan perbandingan/skala tertentu atau dengan kata lain representasi dua dimensi dari suatu ruang tiga dimensi. Ilmu yang mempelajari pembuatan peta disebut kartografi.

2. **Kompas** adalah alat penunjuk arah yang selalu menunjuk kearah Utara, dengan melihat arah Utara-Selatan pada Kompas dan dengan membandingkannya dengan arah Utara Peta kita sudah dapat mengorientasikan posisi pada peta

Kompas adalah alat navigasi untuk mencari arah berupa sebuah panah penunjuk magnetis yang bebas menyelaraskan dirinya dengan medan magnet bumi secara akurat. Kompas memberikan rujukan arah tertentu, sehingga sangat membantu dalam bidang navigasi. Arah mata angin yang ditunjuknya adalah utara, selatan, timur, dan barat. Apabila digunakan bersama-sama dengan jam dan sekstan, maka kompas akan lebih akurat dalam menunjukkan arah. Alat ini membantu perkembangan perdagangan maritim dengan membuat perjalanan jauh lebih aman dan efisien dibandingkan saat manusia masih berpedoman pada kedudukan bintang untuk menentukan arah.

3. **GPS** (*Global Positioning Satellite/System*) adalah perangkat yang dapat mengetahui posisi koordinat bumi secara tepat yang dapat secara langsung menerima sinyal dari satelit. Perangkat GPS modern menggunakan peta sehingga merupakan perangkat modern dalam navigasi di darat, kapal di laut, sungai dan danau serta pesawat udara. *Global Positioning System* (GPS) adalah satu-satunya sistem navigasi satelit yang berfungsi dengan baik. Sistem ini menggunakan 24 satelit yang mengirimkan sinyal gelombang mikro ke Bumi. Sinyal ini diterima oleh alat penerima di permukaan, dan digunakan untuk menentukan posisi, kecepatan, arah, dan waktu. Sistem yang serupa dengan GPS antara lain GLONASS Rusia, Galileo Uni Eropa, IRNSS India.

4. **Radar** (**Radio Ddetection and Ranging**), yang berarti deteksi dan penjarakan radio, adalah sistem yang digunakan untuk mendeteksi, mengukur jarak dan membuat map benda-benda seperti pesawat dan hujan. Istilah radar pertama

kali digunakan pada tahun 1941, menggantikan istilah dari singkatan Inggris RDF (Radio Direction Finding). Gelombang radio kuat dikirim dan sebuah penerima mendengar gema yang kembali. Dengan menganalisa sinyal yang dipantulkan, pemantul gema dapat ditentukan lokasinya dan kadang-kadang ditentukan jenisnya. Walaupun sinyal yang diterima kecil, tapi radio sinyal dapat dengan mudah dideteksi dan diperkuat.

5. **Sonar (sound navigation and ranging)**, merupakan istilah Amerika yang pertama kali digunakan semasa Perang Dunia, yang berarti penjarakan dan navigasi suara, adalah sebuah teknik yang menggunakan penjarakan suara dalam air untuk navigasi atau mendeteksi kendaraan air lainnya. Sementara itu, Inggris punya sebutan lain untuk sonar, yakni ASDIC (Anti-Submarine Detection Investigation Committee. Sonar merupakan sistem yang menggunakan gelombang suara bawah air yang dipancarkan dan dipantulkan untuk mendeteksi dan menetapkan lokasi obyek di bawah laut atau untuk mengukur jarak bawah laut. Sejauh ini sonar telah luas digunakan untuk mendeteksi kapal selam dan ranjau, mendeteksi kedalaman, penangkapan ikan komersial, keselamatan penyelaman, dan komunikasi di laut.

Itu adalah sebagian kecil contoh peralatan yang digunakan sebagai alat bantu menentukan arah di atas kapal, atau yang lazim disebut sebagai peralatan navigasi di laut/kapal.

B. Kegiatan Belajar

1. Tujuan Pembelajaran

- a) Melalui kegiatan pembelajaran ini siswa diajak untuk mengetahui aktifitas Navigasi (*Navigation*).
- b) Selanjutnya siswa diajak untuk lebih dalam memahami peristilahan *Maritime English* secara praktis dalam hal Navigasi (*Navigation*) berikut peristilahannya.

- c) Terkait dengan kompetensi grammar, siswa diarahkan untuk mengetahui penggunaan kalimat/klausa pengandaian atau *Conditional clauses (Conditional types)*) yang sering digunakan dalam aktifitas berbahasa Inggris maritim dan perkapalan.

2. Uraian Materi

Marine navigation is literally the moving of a vessel from one place to another (the word 'navigation' comes from Latin: *navis* = ship, *agere* =move). All navigation, whether it is done by reading the stars or by GPS, involves locating the navigator's position by using the known locations of other things.

An essential tool in navigation is the nautical chart which, unlike conventional maps, gives information about: water depth, the nature of the seabed, hazards to shipping, the location of landmarks visible from the sea, man-made navigational aids such as buoys and lighthouses, details about coastline, hazards to shipping – both natural and man-made, information about tides and currents and details about harbours and bridges. Nautical charts are marked with lines of latitude (north—south) and lines of longitude (east -- west). These are expressed in degrees, minutes and seconds. Mostly positions are given with respect to latitude and longitude. These are given, latitude first and look like this: 49°30'02" N, 123°30'30" W.

Modern navigation techniques use positioning provided by satellites. Otherwise it is done by plotting lines of position and direction (expressed as 'bearings'). A navigator draws two lines of position and his position is where the two lines intersect.

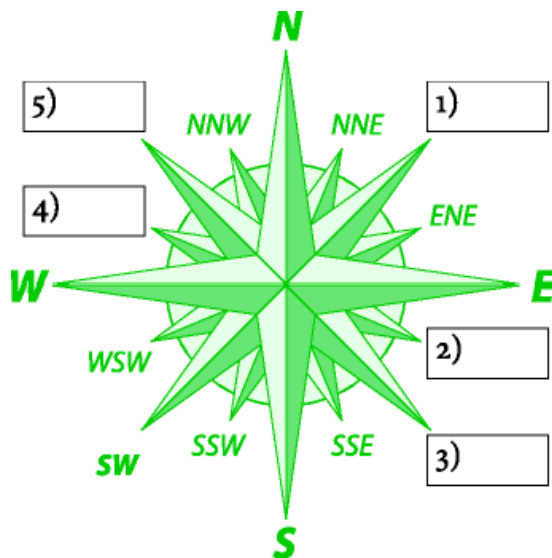
The exercises in this unit focus on expressing measurement within the context of basic nautical navigation: position, bearings, speed, time and distance.

Positions are expressed in degrees and minutes of latitude and longitude. Latitude is the position north or south of the equator and longitude is position east or west

of Greenwich. For example: 'my position is 15 degrees 34 minutes North, 061 degrees 29 minutes West.' When a position is related to a clearly defined object on a chart, the bearing is expressed in degrees from true north from the charted mark. For example: 'my position is bearing 137 degrees from Red Star lighthouse distance 1.5 nautical miles/kilometres.' Bearings are also given relative to vessels such as: 'pilot boat is bearing 215 degrees from you.' Bearings are expressed relative to the vessel's port or starboard bow. For example: 'Buoy 080 degrees on your port bow.' When distances are given, their unit of measurement should be made clear (kilometres/nautical miles) and time is expressed by a 24 hour UTC notation.

Do this quiz to test your knowledge of navigation.

- 1) The angles of a triangle add up to _____ degrees.
- 2) What is the circle halfway between the north and south poles?
- 3) What do we call the lines running north/south through the poles?
- 4) How many satellites do you need for a gps position?
 - a) one
 - b) three
 - c) twenty four
- 5) Label points 1-5 on the compass rose:



a. Grammar

THE CONDITIONAL CLAUSE

Study these sentences:

#1 If you go there tonight, you will meet Tom.

#2 If you went there tonight, you would meet Tom.

#3 If you had gone there yesterday, you would have met Tom.

Try to translate the sentences into your own language. They represent different kinds of conditions.

#1. Possible condition – the condition is quite real and possible and is quite likely to come true.

#2. Less likely but possible condition – the condition is more unlikely to materialise but still might possibly happen.

#3. Impossible condition – this condition is no longer a realistic option – the time for it has passed by and it can not materialise.

Study the sentences again:

#1 If you go there tonight, you will meet Tom.

#2 If you went there tonight, you would meet Tom.

#3 If you had gone there yesterday, you would have met Tom.

NOTE!!!

The above sentences are a combination of:

- a main clause : you will meet Tom
- a conditional sub clause: if you go there tonight
- the main clause contains an auxiliary verb: will or would + main verb.
- the conditional clause contains a simple tense form of the verb: go.

USE OF TENSE FORMS AND AUXILIARY VERBS

Study the following sentences:

The use of Tense forms and auxiliary verbs follow a very regular pattern in main clause – if clause combinations:

#1 I If you go there tonight, you will meet Tom.

if -clause Simple Present, main clause the auxiliary will.

#2 If you went there tonight, you would meet Tom.

if -clause Past Tense, main clause the auxiliary would

#3 If you had gone there yesterday, you would have met Tom.

if -clause Past Perfect Tense , main clause the auxiliary would + have + Past Participle of main verb, i.e. -ed form of regular verbs, or III form of irregular verbs

NOTE! Other auxiliaries may be used to express the conditions.

#1. If you listen to the radio, you can improve your knowledge.

If you go there tonight, you may meet Tom. (it is uncertain)
 If you go there tonight, you might meet Tom. (it is even more uncertain)

#2. If Tom were here he might/could help us.
 If you listened to the radio, you could/might improve your knowledge.
 If you went there tonight you might meet Tom.

#3 If Tom had been here he would/could/might have helped us.

Conditional clause	Main clause
1. If + Present Tense	will + inf / present tense / imperative
a. If you help me with the dishes (if + pres),	I will help you with your homework. (will + inf)
b. If the sum of the digits of a number is divisible by three,	the number is divisible by three (Pres. tense)
c. If you see Mr Fox tonight, tell him I am ill. (imperative).	
2. If + Past Tense	would + inf
3. If + Past Perfect Tense	would have + past participle
We do not normally use <u>will</u> or <u>would</u> in the conditional clause, only in the main clause.	

Uses of the Conditional

1. **First conditional**

Nature: Open condition, what is said in the condition is possible. Time: This condition refers either to present or to future time. e.g. If he is late, we will have to go without him. If my mother knows about this, we are in serious trouble.

2. **Second conditional**

Nature: unreal (impossible) or improbable situations.

Time: present; the TENSE is past, but we are talking about the present, now. e.g. If I knew her name, I would tell you. If I were you, I would tell my father.
Compare: If I become president, I will change the social security system. (Said by a presidential candidate) If I became president, I would change the social security system. (Said by a schoolboy: improbable) If we win this match, we are qualified for the semifinals. If I won a million pounds, I would stop teaching. (improbable)

3. **Third conditional**

Nature: unreal

Time: Past (so we are talking about a situation that was not so in the past.)
e.g. If you had warned me, I would not have told your father about that party. (But you didn't, and I have).

Remember!

1. The conditional construction does not normally use *will* or *would* in if-clauses. *EXCEPTION*: If *will* or *would* express willingness, as in requests, they can be used in if-clauses.

e.g. If you will come this way, the manager will see you now.
I would be grateful if you would give me a little help.
(= ± please, come this way; please, give me...)

2. For the second conditional, *were* replaces *was*:

If I were a rich man...

3. After *if*, we can either use "some (-one, -where...)" or "any(-one,-where...).

If I have some spare time next weekend...or :
If I have any spare time...

4. Instead of *if not*, we can use *unless*.

e.g. I'll be back tomorrow unless there is a plane strike.
He'll accept the job unless the salary is too low.

5. There is a "mixed type" as well, for the present results of an unreal condition in the past:

If + Past Perfect - would + inf.
If you had warned me [then], I would not be in prison [now].

b. Reading

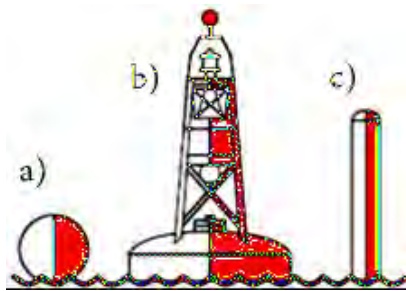
Exercise.

Pre-reading discussion: what is a navigational notice, who is it for and what do you expect it to tell you? Read these 4 navigational notices and choose the correct answers (a, b or c):

NOTICE A

Information: On 13th December the harbour authority changed the fairway buoy to a spherical red and white landfall buoy. The light signal is the same: 1 long flash every 10 seconds.

1) Which is the new buoy?



2) Which statement is correct?

- a. There is a new buoy and a new light
- b. The light signal on the buoy is changed
- c. The light signal is the same as before

3) Which is the light signal?

- a. Light flashes on for ten seconds
- b. After 10 seconds the light comes on
- c. After 10 seconds the light goes off

NOTICE B

Harbour traffic control signals are on both sides of the bridge. They give the following instructions:

Signal : THREE VERTICAL RED LIGHTS

Action : VESSELS MUST NOT PROCEED

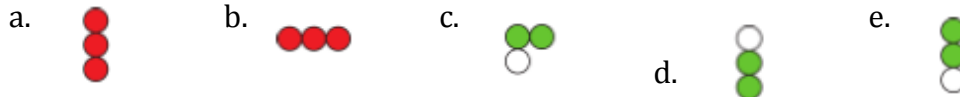
Signal : TWO VERTICAL GREEN LIGHTS OVER ONE WHITE

Action : VESSELS HAVE PERMISSION TO PROCEED

4) What is on both sides of the bridge?

- a. Lights
- b. Harbour traffic control
- c. Instruction

5) Which of these signals means 'go ahead'?



6) Which of the signals above means 'do not enter'?

7) Which is the correct message from the harbour authority to a ship when the lights are two green over white?

- a. 'I intend to proceed.'
- b. 'Instruction: proceed to berth.'
- c. 'Stop now.'

NOTICE C

COAST GUARD RCVD 2 REPORTS

1) ALL NAV LTS ON THE RAILWAY BRIDGE ARE NOT IN OPERATION

2) SHOALING AND A MISSING BUOY AT MM 394.1.

ALL MARINERS ARE REQ TO PROCEED WITH EXTREME CAUTION.

- 8) Find abbreviations in the notice that mean:
- a. 'received'
 - b. 'navigation'
 - c. 'lights'
 - d. 'required'
- 9) What does the first line of the notice mean?
- a. The coast guard has made two reports.
 - b. Two reports have come in to the coast guard.
 - c. This is Coast Guard Report number 2.
- 10) The first report says:
- a. 'There are no navigation lights on the railway bridge.'
 - b. 'There are new navigation signals on the railway bridge.'
 - c. 'All navigation lights on the bridge are now operating.'
- 11) The second report warns of:
- a. deep water and no warning buoy
 - b. a new buoy and shallow water
 - c. shallow water and no buoy
- 12) The notice orders mariners to:
- a. be careful
 - b. cross the area quickly
 - c. not proceed

NOTICE D

SWEDISH NAV WARN 329 S BALTIC. HANÖBUKTEN. ÅHUS. GEOTECHNICAL OPERATIONS IN PROGRESS WITHIN 1 NM FROM PSN 55-52.4N 014-31.4E BY WORKING PLATFORM 'AARSLEFF JACK IV' AND TUG 'BALTSUND'. WIDE BERTH REQUESTED.

13) What is happening in the South Baltic?

- a. Drilling
- b. Building
- c. Salvaging

14) What is 'AARSLEFF JACK IV'?

- d. A Swedish company
- e. A Swedish ship
- f. A floating work surface

15) 'Wide berth requested' means:

- a. We need a big area to work in.
- b. Do not come close.
- c. Please send help.

Mengasosiasi - Mengkomunikasi

Buatlah catatan dan kesimpulan dari hasil pengamatan, diskusi dan eksplorasi yang telah anda lakukan, lalu sampaikan dalam kelas hasil pengamatan anda!

c. Vocabulary

A few common symbols are selected from the key of the average nautical chart. There are many different symbols and symbols can have slight differences (e.g. light buoys vary according to colour, size, shape and type of light and symbols vary accordingly). A very useful aid here would be a nautical chart or sections from nautical charts which students can talk about – describing them and explaining implications for shipping.

Write these words next to their symbols. DO this either individual or in group.

obstruction	danger	anchorage	wreck under water
foul sea bed	rock	visible wreck	light buoy
oil rig			

	
	
	
	
	
<i>Obstn</i>	
<i>#</i>	
	
	

d. Speaking

Sekarang perhatikan dan dengarkan apa yang Guru ucapkan. Lakukan pengucapan secara berulang-ulang sampai anda paham bagaimana mengucapkannya dengan baik dan benar.

Navigational Warning [Student v]	
Time of message:	14.30 UTC June 26
Message:	Pan message for man over board sent by M/V 'Otello', call sign: FMEJ
Location:	50 15,00 N - 001 39,2 W
Request:	Ships proceeding in the vicinity to keep a sharp look out and report all information on Channel 16

e. Structure

Corrections and repetitions in SMCPs

Exercise 1. Enter either 'repeat', 'say again' or 'correction' into the gaps:

- 1) My draft is one two decimal six metres _____ one-two decimal 6 metres.
- 2) My present speed is 14 knots – mistake., my present speed is 12, one-two, knots.
- 3) _____ all after 'vicinity'.

Exercise 2. Phrases of these messages are mixed up. Write the sentences correctly:

- 1) overtake / do not/do not overtake / repeat
- 2) correction / turn to starboard and pass astern / mistake / turn to port
- 3) change course / change course to two three zero / to two three zero / repeat / CV
Passing Wind / Over
- 4) my position / West 133° mistake / Correction West 132° / is North 69°24'
- 5) understood / please say again / time now is 02:58 UTC / all after UTC

Exercise 3. Answer the questions.

1. You receive this warning about a dangerous obstruction but the end is not clear:
“Securité, Securité Securité: Dangerous obstruction at location ****brzzzz**** ...” What do you say?
2. You send this message: “My ETA is one zero four five U T C” but you make a mistake – your ETA is 12.45. What do you say?
3. A vessel is coming too close. It is very important that the vessel gives you a wide berth. What do you say?

3. Refleksi

Setelah mengikuti kegiatan pembelajaran ini, masing-masing siswa harus mampu menuliskan secara deskriptif atau naratif tentang beberapa hal dibawah ini. *(Gunakan kertas tambahan atau lembar terpisah, apabila perlu)*

1. Apakah anda merasakan manfaat dari pembelajaran ini? Jika Ya, sebutkan apa saja manfaatnya? Jika Tidak, berikan penjelasan?

2. Apa rencana implementasi pengetahuan dan keterampilan dari hasil kegiatan pembelajaran ini.

3. Apa saran dan masukan anda untuk kegiatan pembelajaran selanjutnya.

4. Tugas

Do this exercise. Answer the following questions.

1. What word stands for Z in the NATO alphabet?
2. When you give positions does longitude come first or second?
3. Which of the following is for distance/speed/bearings?
minutes/cables/knots
4. What are COLREGS?
5. Match the procedure words on the left with the correct meanings on the right.

GO AHEAD

I can hear you clearly

OUT

This is the end of my transmission an a response is necessary

OVER

I have received your initial call; continue with the rest of your message

RADIO CHECK

This is the end of my transmission and no answer is expected

I READ YOU 5 BY 5

What is my signal strength

5. Tes Formatif

Study the navigational warning and the text (on the following page) which puts the navigational warning into full sentences.

NAVIGATIONAL WARNING

041630 UTC SEP
BALTIC SEA NAV WARN 008
KATTEGAT. BALTIC SEA. THE SOUND, GULF OF FINLAND
V. LONG TOW (650 M) DEPART GRELEN SWEDEN APPROX 042000 UTC SEP TO
PASS THROUGH DROGDEN
TOWBOAT 'EUROSUND' CALLSIGN OWFB2
WIDE BERTH REQUESTED

4th September 16.30 UTC

Baltic Sea navigational warning number 008

This navigational warning is for Kattegat, the Baltic Sea, the Sound and the Gulf of Finland.

A very long tow of six hundred and fifty metres departs Greden in Sweden on September 4th at approximately 20.00 UTC. The tow passes through Drogden. The name of the tow boat is Eurosund. Its call sign is Oscar Whiskey Foxtrot Bravo – two. Please give a wide berth.

Answer these questions:

- 1) What is this date and time? 140845 U T C NOV
- 2) What is this call sign in letter codes? AXYH-5
- 3) What comes first in a navigational warning – description of the danger or the location?
- 4) Describe the location of Kattegat.

Now study this navigational warning and write in full sentences

NAVIGATIONAL WARNING

281400 UTC JUN
BALTIC SEA NAV WARN 007
SE BALTIC.
DERELICT SEMISUBMERGED YACHT ADRIPT 55-32N
019-34E AT 280245 UTC JUN.

C. Penilaian

1. Sikap

Nilai diperoleh dari pengamatan guru terhadap keaktifan siswa selama proses pembelajaran berlangsung

Lembar Penilaian Sikap

No	Nama Siswa	Kriteria Penilaian				Jumlah Skor	Ket.
		Perhatian (1)	Disiplin (2)	Tekun (3)	Aktif Mendengar dan bertanya (4)		
1.							
2.							
3.							
dst							

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

$$\text{Nilai akhir} = \frac{\text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Peserta didik memperoleh nilai :

- a. Sangat Baik (SB) : apabila memperoleh skor 3.66 s.d 4.
- b. Baik (B) : apabila memperoleh skor 2.66 s.d 3.65.
- c. Cukup (C) : apabila memperoleh skor 1.66 s.d 2.65.
- d. Kurang (K) : apabila memperoleh skor < 1.65.

2. Pengetahuan

Nilai diperoleh dari Pengamatan selama proses diskusi kelompok, presentasi dan tes tertulis dan penugasan.

Pedoman penilaian :

$$\text{Nilai akhir} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Nilai untuk Keterampilan menggunakan penilaian kuantitatif 1 – 4 :

Sangat Baik = 4

Baik = 3

Cukup = 2

Kurang = 1

3. Keterampilan

Nilai diperoleh dari penyelesaian tugas (baik individu maupun kelompok) pada saat diskusi dan presentasi (bermain peran/*Role play*).

a. Rubrik kegiatan Diskusi

No	Nama Siswa	Aspek Pengamatan					Jml Skor	Nilai	Ket
		Kerja sama	Mengkomunikasikan pendapat	Toleransi	Keaktifan	Menghargai pendapat teman			
1.									
2.									
3.									
4.									
Dst									

Keterangan Skor :

Kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

Keterangan Skor :

$$\text{Nilai} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

b. Rubrik Penilaian Presentasi

No	Nama Siswa	Aspek Penilaian						Σ Skor	Nilai	Ket
		Komuni Kasi	Sistematika penyampaian	Wawasan	Keberanian	Antusias	Gesture dan penampilan			
1.										
2.										
3.										
4.										
5.										
Dst										

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

Keterangan Skor :

$$\text{Nilai} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

c. Lembar Pengamatan Bermain Peran

Kelompok /Kelas :

Kegiatan : Bermain peran /*role play*

Tema /KD :

Nama	Aspek Penilaian			Rata-Rata Nilai
	Partisipasi	Penghayatan Peran	Kerjasama	
1.				
2.				
3.				
4.				
5.				
6.				
dst				

Pedoman Penskoran

Aspek Penilaian	Deskripsi	Nilai
Partisipasi	<ul style="list-style-type: none"> Keterlibatan dalam bermain peran Peran dari tokoh yang diperankan 	60 – 100
Penghayatan Peran	<ul style="list-style-type: none"> Penjiwaan terhadap tokoh Kesesuaian kostum tokoh Semangat bermain peran 	60 – 100
Kerjasama	<ul style="list-style-type: none"> Membantu teman Tenggang rasa dengan teman 	60– 100

Kriteria Pencapaian Kompetensi /Ketuntasan Belajar

Aspek				
Pengetahuan 1-4	Predikat	Keterampilan 1-4	Predikat	Sikap SB/ B/ C/ K
Keterangan		KKM Pengetahuan dan Keterampilan KKM \geq 2.66 KKM Sikap : Baik		

Bila tingkat pencapaian kompetensi anda mencapai KKM > 2.66, maka anda dinyatakan tuntas dan dapat melanjutkan ke kegiatan belajar selanjutnya. Tetapi apabila tingkat pencapaian kompetensi anda mencapai KKM < 2.66 maka anda dinyatakan belum tuntas, maka anda harus mengulangi mulai dari kegiatan belajar, terutama pada bagian yang masih belum anda kuasai.

Kegiatan Pembelajaran 6 : Cargo Handling

A. Deskripsi

Cargo handling adalah aktifitas perkapalan terkait dengan pengelolaan barang, baik menaikkan ataupun menurunkan barang, dari dan ke atas kapal. Secara praktis, pengetahuan tentang kapalnya itu sendiri adalah dasar yang harus dimiliki oleh setiap siswa. Hal tersebut sesuai dengan materi pada kegiatan pembelajaran sebelumnya, dalam hal ini pada KB 2 tentang '*types of the ship*', sehingga setiap siswa akan dapat dengan mudah menguasai kompetensi pada kegiatan pembelajaran ini.

B. Kegiatan Belajar

1. Tujuan Pembelajaran

- a. Melalui kegiatan pembelajaran ini siswa diajak untuk mengetahui aktifitas *cargo handling*.
- b. Selanjutnya siswa diajak untuk lebih dalam memahami peristilahan *Maritime English* secara praktis dalam hal *cargo handling* berikut peristilahannya.
- c. Terkait dengan kompetensi grammar, siswa diarahkan untuk memahami penggunaan *comparative/superlatives* yang sering digunakan dalam aktifitas berbahasa Inggris maritim dan perkapalan.

2. Uraian Materi

There are many types of cargo ship. Some of them, like roll-on roll-off ferries, oil tankers and car transporters, are designed for specific tasks. Other cargo vessels include:

- Bulk carriers
- Container ships (carrying standardized size containers)
- Reefer ships (with refrigerated cargo holds)
- Heavy lift vessels
- Tankers
- LNG carriers (liquefied, natural gas)
- Coasters (ships with shallow hulls)
- FPSO units (Floating Production, Storage and Offloading vessel)

Most dry cargo is carried by container ships. Containers are a standard size and they are piled up on the decks of container vessels so that there is no waste of space. Cargoes are of various categories. They are classified as either dry goods, liquids or 'general'. The IMO classes dangerous (hazardous) cargo on a list ranging from 1–9 to include explosives, gases, flammable liquids, oxidising substances, toxic and infectious substances, radioactive substances and corrosives.

a. Vocabulary

Coba anda sebutkan dan jelaskan jenis-jenis kapal cargo (*cargo vessels*) yang anda ketahui.



Kemudian, perhatikan dan amati gambar berikut dibawah ini.

- 1) Identify the types of vessels in the pictures.
- 2) What two different types of cargoes do the pictures show?
- 3) Identify the following things:

Davits – Containers – Quays – Lines – Gantry – Hold – Pier

Choose the best definitions from a, b and c:

1) Bill of lading

- a) A document with information about a cargo
- b) A charge for transporting cargo
- c) A destination

2) Warehouse

- a) Area for storing cargo on a ship
- b) Shop
- c) Building for storage

3) Quay

- a) Place for unloading ships
- b) A type of bridge
- c) A platform over the water

4) Crane

- a) Equipment for lifting and lowering heavy things
- b) Machine for moving cargo to a storage area
- c) A type of package

5) Stevedore

- a) A man's name
- b) A docker
- c) A ship's crewman

6) Sack

- a) A type of box
- b) A room

c) A type of bag

7) Pallet

a) A portable platform for cargo

b) A type of box

c) A container

8) Fork lift truck

a) Long distance transporter

b) Vehicle for moving pallets

c) A lift on a truck

9) Hold

a) A lift

b) Crew's quarters

c) Area for storing cargo

10) Hatch

a) a room on board

b) a door in the deck

c) a ladder

Use the words above (1-10) to complete these sentences

1. Open the escape _____ and get out.
2. The _____ driver is moving the cargo to a storage area.
3. Put all the boxes onto a _____.
4. Embark at _____ number thirty one.
5. The delivery date on the _____ is the 5th on November.
6. My father was a _____ and I am one too.
7. The ship's _____ is clean and ready for loading.
8. We must use a _____ to lift a heavy box.
9. Each _____ of rice weighs 200 kilos.
10. Take the cargo from the ship and store it in _____ number three.

Study the dialogue between a cargo inspector and a ship's captain and find words that mean:

- 1) broken
- 2) a hole
- 3) at the time of
- 4) what is inside
- 5) temperature recorders
- 6) working

- Inspector : Are there any damaged sacks Captain?
- Captain : Yes, some of them are split
- Inspector : When did they split?
- Captain : During loading
- Inspector : I see. Have rats eaten the contents of any of the sacks?
- Captain : There's no sign of that.
- Inspector : ok. Are the thermometers in the hold operational?
- Captain : Yes, they are all operational.

b. Structure

Comparatives/superlatives

Background:

- 1) Rules for forming comparatives
 - a) Add '-er' to the ends of single syllable adjectives.

Examples: fast – faster

This vessel is faster than that one.

- b) For two syllable adjectives ending in '-y' change the y to '-ier'

Examples: happy – happier

The ship is a happier place now.

- c) With adjectives of two or more syllables add the word 'more'.

Examples: di_cult - more di_cult

A mariner's job is more di_cult than almost all others.

2) Rules for forming superlatives

- a) Put 'the' before one syllable adjectives and '-est' to the end of the adjective.

Examples: cheap – the cheapest

What is the cheapest way to transport this cargo?

- b) For adjectives of two or more syllables put the words 'the most' before the adjective.

Examples: di_cult – the most di_cult

I think a mariner's job is the most di_cult in the world.

- c) c) For two syllable adjectives ending in '-y' put 'the' before the adjective and change the 'y' to 'iest'.

Example: happy – the happiest

This is the happiest man I know.

3) Important exceptions

- a) Good (adjective) – better – the best

Example: This ship is better than that one.

- b) Bad – worse – the worst

Example: I thought the last voyage was bad but this one is worse.

Exercise 1.

Answer these questions:

1) What is the opposite of *more*? _____.

2) Complete this set of words: _____ , better, best.

- 3) Which is correct: *more dangerous* or *dangerouser*?
- 4) Complete this set of words: bad, _____ , _____.

Exercise 2.

Study these sentences. Identify the comparatives and superlatives:

- 1) Move the heaviest pallets first.
- 2) Labour costs are higher than equipment.
- 3) Our cargo is more dangerous than usual.
- 4) It is the least safe choice, but we have to do it.
- 5) Lash those pallets more securely.

Exercise 3.

Complete these sentences using the comparative form of the adjectives in brackets plus than:

Example:

Labour is _____ (expensive) equipment.

Labour is more expensive than equipment.

- 1) This is _____ (hard) I expected.
- 2) A little cargo is _____ (good) nothing.
- 3) The hold is now _____ (cold) it was before.

Exercise 4.

Complete these sentences using the superlative form of the adjectives in brackets:

- 1) Labour is our _____ (high) cost.
- 2) The _____ (bad) problem in port is stowaways.
- 3) The Olympic voyager is the _____ (fast) ship.

- 4) Only the _____ (good) stevedores work here.
- 5) Explosives are the _____ (dangerous) cargo.

Exercise 5.

Complete the dialogues using the comparative form of the words in brackets (+ than if necessary) or the superlative form of the word in brackets:

A: Why do you use a crane?

B: Moving cargo is much _____ (easy) with a crane.

A: Which is the _____ (dangerous) cargo you handle?

B: Poisons are dangerous but explosives are _____ (dangerous) poisons.

A: Who gets _____ (little) money, a stevedore or a deck hand?

B: A deck hand usually gets (little) money than a stevedore.

c. Reading

In some countries stevedores demand higher than average pay. Because this means that cargo handling costs are very high, steps have been taken by shipping companies and port authorities to rationalise the process of loading, unloading and storing cargo. Changes have included the spread of containerization which makes mechanised handling of bulk goods easier and cheaper. In many ports computers and robotics are used in the process.

Handling cargo is often part of a mariner's routine – especially for those on Ro- Ro vessels and mariners working in harbours, on rivers and canals. Mariners are trained in cargo handling procedures and they learn how stowage of its cargo affects the stability of a ship.

In some places and under some conditions the work of unloading and loading is done by mariners; not by stevedores. It is normal practice to pay the mariners extra for doing this.

Before you read, think of at least three examples of each of the following:

- 1) dry cargo
- 2) dangerous cargo
- 3) perishable cargo
- 4) fragile cargo

the sentences of this text are mixed up. Number them in the correct order.

TRANSPORTING COCOA BEANS

_____ Stevedores on the quay put more pallets of cocoa beans in the empty space.

_____ Stevedores use forklift trucks to remove the pallets from the quay to a warehouse.

_____ Stevedores then load the sacks on pallets.

_____ When the ship arrives at its destination crew and stevedores offload the cargo.

2. Lorries take sacks of cocoa beans to the quay.

_____ The ship's crane lifts the first group of pallets and transfers them into the ship's cargo hold.

_____ The ship's crane transfers the cargo from the ship's hold to the dock.

Mengasosiasi - Mengkomunikasi

Buatlah catatan dan kesimpulan dari hasil pengamatan, diskusi dan eksplorasi yang telah anda lakukan, lalu sampaikan dalam kelas hasil pengamatan anda!

3. Refleksi

Setelah mengikuti kegiatan pembelajaran ini, masing-masing siswa harus mampu menuliskan secara deskriptif atau naratif tentang beberapa hal dibawah ini. (*Gunakan kertas tambahan atau lembar terpisah, apabila perlu*)

1. Apakah anda merasakan manfaat dari pembelajaran ini? Jika Ya, sebutkan apa saja manfaatnya? Jika Tidak, berikan penjelasan?

2. Apa rencana implementasi pengetahuan dan keterampilan dari hasil kegiatan pembelajaran ini.

3. Apa saran dan masukan anda untuk kegiatan pembelajaran selanjutnya.

4. Tugas

Study these cargo shipping instructions and say if the statements (1–5) are true or false.

SHIPPING INSTRUCTIONS	
Exporter/shipper	Aspers (UK) PLC, PO Box No. 678, Croydon, Surrey
Booking number	AK0010904
Country of final destination	Argentina
Country of origin of goods	Germany
Consignee	Capriella Box, SA, Casilla de Carrero, Buenos Aires, Argentina
Description of goods	AC generators
Quantity	5
Gross weight (total)	1,000 kg
Volume (m ³)	4.00
Ocean freight payable at: value	prepaid € 6,755.00

- | | | |
|--|------|-------|
| 1) The goods are going from Germany to Argentina. | TRUE | FALSE |
| 2) The consignee is sending the goods | TRUE | FALSE |
| 3) The cargo is electrical equipment | TRUE | FALSE |
| 4) No money will be collected at the other end | TRUE | FALSE |
| 5) The cost of transporting the cargo is € 6,755.00. | TRUE | FALSE |

5. Tes Formatif

Complete the following form using this information:

A Belgian company called Xanadu located at 121 Rue Des Brasseurs in Gilly is sending a consignment of Japanese made tractor engines to a company in Morocco. This company is called Andou Motors of Route de Rabat, Ain Sbaâ, in Casablanca. There are fifteen engines in the consignment. Each engine weighs 300 kg and is approximately 3 m³. The value of one engine is \$ 25,000 and the consignee has paid \$12,000 already. The rest will be paid on delivery.

SHIPPING INSTRUCTIONS	
Exporter/shipper:	_____

Booking number:	_____
Country of final destination:	_____
Country of origin of goods:	_____
Consignee:	_____

Description of goods:	_____
Quantity:	_____
Gross weight (total):	_____
Volume (m ³):	_____
Ocean freight payable at:	_____
Value	_____

C. Penilaian

1. Sikap

Nilai diperoleh dari pengamatan guru terhadap keaktifan siswa selama proses pembelajaran berlangsung

Lembar Penilaian Sikap

No	Nama Siswa	Kriteria Penilaian				Jumlah Skor	Ket.
		Perhatian (1)	Disiplin (2)	Tekun (3)	Aktif Mendengar dan bertanya (4)		
1.							
2.							
3.							
dst							

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

$$\text{Nilai akhir} = \frac{\text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Peserta didik memperoleh nilai :

- a. Sangat Baik (SB) : apabila memperoleh skor 3.66 s.d 4.
- b. Baik (B) : apabila memperoleh skor 2.66 s.d 3.65.
- c. Cukup (C) : apabila memperoleh skor 1.66 s.d 2.65.
- d. Kurang (K) : apabila memperoleh skor < 1.65.

2. Pengetahuan

Nilai diperoleh dari Pengamatan selama proses diskusi kelompok, presentasi dan tes tertulis dan penugasan.

Pedoman penilaian :

$$\text{Nilai akhir} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Nilai untuk Keterampilan menggunakan penilaian kuantitatif 1 – 4 :

Sangat Baik = 4

Baik = 3

Cukup = 2

Kurang = 1

3. Keterampilan

Nilai diperoleh dari penyelesaian tugas (baik individu maupun kelompok) pada saat diskusi dan presentasi (bermain peran/*Role play*).

a. Rubrik kegiatan Diskusi

No	Nama Siswa	Aspek Pengamatan					Jml Skor	Nilai	Ket
		Kerja sama	Mengkomunikasikan pendapat	Toleransi	Keaktifan	Menghargai pendapat teman			
1.									
2.									
3.									
4.									
Dst									

Keterangan Skor :

Kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

Keterangan Skor :

$$\text{Nilai} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

b. Rubrik Penilaian Presentasi

No	Nama Siswa	Aspek Penilaian						Σ Skor	Nilai	Ket
		Komuni Kasi	Sistematika penyampaian	Wawasan	Keberanian	Antusias	<i>Gesture</i> dan penampilan			
1.										
2.										
3.										
4.										
5.										
Dst										

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

Keterangan Skor :

$$\text{Nilai} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

c. Lembar Pengamatan Bermain Peran

Kelompok /Kelas :

Kegiatan : Bermain peran /*role play*

Tema /KD :

Nama	Aspek Penilaian			Rata-Rata Nilai
	Partisipasi	Penghayatan Peran	Kerjasama	
1.				
2.				
3.				
4.				
5.				
6.				
dst				

Pedoman Penskoran

Aspek Penilaian	Deskripsi	Nilai
Partisipasi	<ul style="list-style-type: none"> Keterlibatan dalam bermain peran Peran dari tokoh yang diperankan 	60 – 100
Penghayatan Peran	<ul style="list-style-type: none"> Penjiwaan terhadap tokoh Kesesuaian kostum tokoh Semangat bermain peran 	60 – 100
Kerjasama	<ul style="list-style-type: none"> Membantu teman Tenggang rasa dengan teman 	60– 100

Kriteria Pencapaian Kompetensi /Ketuntasan Belajar

Aspek				
Pengetahuan 1-4	Predikat	Keterampilan 1-4	Predikat	Sikap SB/ B/ C/ K
Keterangan		KKM Pengetahuan dan Keterampilan KKM \geq 2.66 KKM Sikap : Baik		

Bila tingkat pencapaian kompetensi anda mencapai KKM > 2.66, maka anda dinyatakan tuntas dan dapat melanjutkan ke kegiatan belajar selanjutnya. Tetapi apabila tingkat pencapaian kompetensi anda mencapai KKM < 2.66 maka anda dinyatakan belum tuntas, maka anda harus mengulangi mulai dari kegiatan belajar, terutama pada bagian yang masih belum anda kuasai.

Kegiatan Pembelajaran 7: Time at Sea

A. Deskripsi

Dalam pembelajaran ini (Time at Sea) siswa diajak untuk memahami tentang pembagian waktu di laut yang berbeda perhitungannya berdasarkan Greenwich dan pembagian waktu setempat di atas kapal untuk mendukung kegiatan kerja di atas kapal yang mempunyai peristilahan dan kode – kode tertentu yang sudah di sepakati. Pembelajaran ini dapat memberikan pengetahuan kepada siswa SMK tentang pembagian waktu di laut dan perhitungannya agar sesuai dengan posisi yang di plot di peta dan perhitungan waktu saat menggunakan alat navigasi.

B. Kegiatan Belajar

1. Tujuan Pembelajaran

Tujuan dari pembelajaran ini adalah agar siswa memahami tentang pembagian waktu di laut berdasarkan perhitungan internasional yang berlaku.

2. Uraian Materi

To determine a position on the Earth's surface, it is necessary and sufficient to know the latitude, longitude, and altitude. Altitude considerations can, of course, be ignored for vessels operating at sea level. Until the mid-1750s, accurate navigation at sea out of sight of land was an unsolved problem due to the difficulty in calculating longitude. Navigators could determine their latitude by measuring the sun's angle at noon (i.e., when it reached its highest point in the sky,



or culmination) or, in the Northern Hemisphere, to measure the angle of Polaris (the North Star) from the horizon (usually during twilight). To find their longitude, however, they needed a time standard that would work aboard a ship. Observation of regular celestial motions, such as Galileo's method based on observing Jupiter's natural satellites, was usually not possible at sea due to the ship's motion. The Lunar Distance Method, initially proposed by Johannes Werner in 1514, was developed in parallel with the marine chronometer. The Dutch scientist Gemma Frisius was the first to propose the use of a chronometer to determine longitude in 1530.

The purpose of a chronometer is to measure accurately the time of a known fixed location, for example Greenwich Mean Time (GMT). This is particularly important for navigation. Knowing GMT at local noon allows a navigator to use the time difference between the ship's position and the Greenwich Meridian to determine the ship's longitude. As the Earth rotates at a regular rate, the time difference between the chronometer and the ship's local time can be used to calculate the longitude of the ship relative to the Greenwich Meridian (defined as 0°) using spherical trigonometry. In modern practice, a nautical almanac and trigonometric sight-reduction tables permit navigators to measure the Sun, Moon, visible planets, or any of 57 navigational stars at any time that the horizon is visible.

The creation of a timepiece which would work reliably at sea was difficult. Until the 20th century the best timekeepers were pendulum clocks, but both the rolling of a ship at sea and the up to 0.2% variations in the gravity of Earth made a simple gravity-based pendulum useless both in theory and in practice.

Time at sea is expressed in the 24 hour notation :

On Land	7.00 a.m	6.25 p.m	midnight	2.30 p.m
At Sea	0700	1825	0000	1430

Traditional time at sea is divided into 4-hour periods called watches

There are six watches.

Midnight 0-0400	Middle Watch	Noon - 1600	afternoon watch
0400 - 0800	Morning watch	1600 - 2000	Evening watch
0800 - noon	forenoon watch	2000 - midnight	First Watch

The evening watch can be divided into two watches :

1600 - 1800 first dog watch

1800 - 2000 second dog watch

Each watch is in the charge of an officer. The traditional patterns are as follows :

	12 - 4	4 - 8	8 -12
a.m	Middle watch	Morning watch	Forenoon watch
p.m	Afternoon watch	Evening watch	First watch
Deck	Second officer	Chief officer	Third officer
Engine	Third Engineer	Second Engineer	Fourth engineer

Traditionally the passage of time at sea is marked by bells. Bells are struck throughout each watch as follows :

After ½ hour	1 bells	After 2 hours	4 bells	After 3 ½ hours	7 bells
After 1 hour	2 bells	After 2 ½ hours	5 bells	After 4 hours	8 bells
After 1 ½ hour	3 bells	After 3 hours	6 bells		

- During the second dog watch the bells strike 1 2 3 8
- 1 bell is struck 15 minutes before each watch is due to change.

Mengasosiasi - Mengkomunikasi

Sekarang saatnya melakukan pencatatan dan pengambilan kesimpulan dari hasil pengamatan, diskusi dan eksplorasi yang telah anda lakukan, lalu sampaikan dalam kelas hasil pengamatan anda!

3. Refleksi

Setelah mengikuti kegiatan pembelajaran ini, masing-masing siswa harus mampu menuliskan secara deskriptif atau naratif tentang beberapa hal dibawah ini. (*Gunakan kertas tambahan atau lembar terpisah, apabila perlu*)

1. Apakah anda merasakan manfaat dari pembelajaran ini? Jika Ya, sebutkan apa saja manfaatnya? Jika Tidak, berikan penjelasan?

2. Apa rencana implementasi pengetahuan dan keterampilan dari hasil kegiatan pembelajaran ini.

3. Apa saran dan masukan anda untuk kegiatan pembelajaran selanjutnya.

4. Tugas

1. Pelajari dengan seksama uraian materi tentang *Time at sea*
2. Amati rumus pembagian waktu di laut dan didarat yang ada sesuai dengan polanya
3. Lakukan latihan perhitungan pembagian waktu di laut dan di darat yang ada
4. Catat hasil latihan yang anda lakukan

5. Tes Formatif

1. When is the First Watch ?
 - a. Noon - 1600
 - b. 0400 – 0800
 - c. 0800 – noon
 - d. 2000 – midnight
2. When is the first dog watch ?
 - a. 1800 -1900
 - b. 1800 – 2000
 - c. 1800 – 2001
 - d. 1800- 2002
3. What is the name of the watch between midnight and 0400 /
 - a. Evening watch
 - b. Morning watch
 - c. Middle watch
 - d. First Watch
4. What time does 4 bells inthe morning watch indicate ?
 - a. After $\frac{1}{2}$ hour
 - b. After 2 hours
 - c. After 3 hours
 - d. After 4 hours

C. Penilaian

1. Sikap

Nilai diperoleh dari pengamatan guru terhadap keaktifan siswa selama proses pembelajaran berlangsung

Lembar Penilaian Sikap

No	Nama Siswa	Kriteria Penilaian				Jumlah Skor	Ket.
		Perhatian (1)	Disiplin (2)	Tekun (3)	Aktif Mendengar dan bertanya (4)		
1.							
2.							
3.							
dst							

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

$$\text{Nilai akhir} = \frac{\text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Peserta didik memperoleh nilai :

- a. Sangat Baik (SB) : apabila memperoleh skor 3.66 s.d 4.
- b. Baik (B) : apabila memperoleh skor 2.66 s.d 3.65.
- c. Cukup (C) : apabila memperoleh skor 1.66 s.d 2.65.
- d. Kurang (K) : apabila memperoleh skor < 1.65.

2. Pengetahuan

Nilai diperoleh dari Pengamatan selama proses diskusi kelompok, presentasi dan tes tertulis dan penugasan.

Pedoman penilaian :

$$\text{Nilai akhir} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Nilai untuk Keterampilan menggunakan penilaian kuantitatif 1 – 4 :

Sangat Baik = 4

Baik = 3

Cukup = 2

Kurang = 1

3. Keterampilan

Nilai diperoleh dari penyelesaian tugas (baik individu maupun kelompok) pada saat diskusi dan presentasi (bermain peran/*Role play*).

a. Rubrik kegiatan Diskusi

No	Nama Siswa	Aspek Pengamatan					Jml Skor	Nilai	Ket
		Kerja sama	Mengkomunikasikan pendapat	Toleransi	Keaktifan	Menghargai pendapat teman			
1.									
2.									
3.									
4.									
Dst									

Keterangan Skor :

Kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

Keterangan Skor :

$$\text{Nilai} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

b. Rubrik Penilaian Presentasi

No	Nama Siswa	Aspek Penilaian						Σ Skor	Nilai	Ket
		Komuni Kasi	Sistematika penyampaian	Wawasan	Keberanian	Antusias	Gesture dan penampilan			
1.										
2.										
3.										
4.										
5.										
Dst										

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

Keterangan Skor :

$$\text{Nilai} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

c. Lembar Pengamatan Bermain Peran

Kelompok /Kelas :

Kegiatan : Bermain peran /*role play*

Tema /KD :

Nama	Aspek Penilaian			Rata-Rata Nilai
	Partisipasi	Penghayatan Peran	Kerjasama	
1.				
2.				
3.				
4.				
5.				
6.				
dst				

Pedoman Penskoran

Aspek Penilaian	Deskripsi	Nilai
Partisipasi	<ul style="list-style-type: none"> Keterlibatan dalam bermain peran Peran dari tokoh yang diperankan 	60 – 100
Penghayatan Peran	<ul style="list-style-type: none"> Penjiwaan terhadap tokoh Kesesuaian kostum tokoh Semangat bermain peran 	60 – 100
Kerjasama	<ul style="list-style-type: none"> Membantu teman Tenggang rasa dengan teman 	60– 100

Kriteria Pencapaian Kompetensi /Ketuntasan Belajar

Aspek				
Pengetahuan 1-4	Predikat	Keterampilan 1-4	Predikat	Sikap SB/ B/ C/ K
Keterangan		KKM Pengetahuan dan Keterampilan KKM \geq 2.66 KKM Sikap : Baik		

Bila tingkat pencapaian kompetensi anda mencapai KKM > 2.66, maka anda dinyatakan tuntas dan dapat melanjutkan ke kegiatan belajar selanjutnya. Tetapi apabila tingkat pencapaian kompetensi anda mencapai KKM < 2.66 maka anda dinyatakan belum tuntas, maka anda harus mengulangi mulai dari kegiatan belajar, terutama pada bagian yang masih belum anda kuasai.

Kegiatan Pembelajaran 8 : Emergencies

A. Deskripsi

Aktivitas di dunia maritim dan perkapalan memang mengandung resiko bahaya yang cukup tinggi. Kita sering melihat dan mendengar tentang kejadian kecelakaan di laut, seperti perahu atau kapal terbalik, tabrakan antar kapal, atau bahkan kecelakaan-kecelakaan lainnya yang tidak pernah terduga sebelumnya sama sekali. Beberapa peristiwa tersebut dapat membuat sebagian orang trauma jika harus menggunakan moda transportasi air seperti kapal laut dalam menunjang aktivitasnya. Oleh karena itu, perlu diantisipasi sejak dini agar kejadian bahaya serta darurat yang tidak diinginkan dapat diminimalisasikan oleh seluruh awak kapal.

Kegiatan pembelajaran ini mengupas tentang bagaimana yang harus dilakukan apabila terjadi situasi darurat dan bahaya di atas kapal. Bagaimana meminta dan memberi bantuan antar kapal, dan lain sebagainya.

B. Kegiatan Belajar

1. Tujuan Pembelajaran

- a. Melalui kegiatan pembelajaran ini siswa diajak untuk mengetahui istilah darurat dan *emergencies* ketika berkegiatan di atas kapal.
- b. Selanjutnya siswa diajak untuk lebih dalam memahami peristilahan *Emergencies* secara praktis berikut peristilahannya.

2. Uraian Materi


Maritime distress signals

Distress signals at sea are defined in the International Regulations for Preventing Collisions at Sea and in the International Code of Signals. Mayday signals must only be used where there is grave and imminent danger to life. Otherwise, urgent signals such as pan-pan can be sent. Most jurisdictions have large penalties for false, unwarranted or prank distress signals.

Distress can be indicated by any of the following officially sanctioned methods:



- Transmitting a spoken voice Mayday message by radio over very high frequency (shorter range VHF) channel 16 (156.8 MHz) and/or high frequency (longer range HF) on 2182 kHz
- Transmitting a digital distress signal by activating (or pressing) the distress button (or key) on a marine radio equipped with Digital Selective Calling (DSC) over the VHF (channel 70) and/or HF frequency bands.
- Transmitting a digital distress signal by activating (or pressing) the distress button (or key) on an Inmarsat-C satellite internet device

- Sending the Morse code group SOS by light flashes or sounds
- Burning a red flare (either hand-held or aerial parachute flare)
- Emitting orange smoke from a canister
- Showing flames on the vessel (as from a burning tar barrel, oil barrel, etc.)
- Raising and lowering slowly and repeatedly both arms outstretched to each side
- Making a continuous sound with any fog-signalling apparatus
- Firing a gun or other explosive signal at intervals of about a minute
- Flying the international maritime signal flags NC 
- Displaying a visual signal consisting of a square flag having above or below it a ball or anything resembling a ball (round or circular in appearance)
- Launching distress rockets

In addition, a distress can be signaled using automated radio signals such as a Search and Rescue Transponder (SART) which responds to 9 GHz radar signal, or an Emergency Position-Indicating Radio Beacon (EPIRB) which operates in the 406 MHz radio frequency. EPIRB signals are received and processed by a constellation of satellites known as COSPAS-SARSAT. Older EPIRBs which use 121.5 MHz are obsolete. Many regulators require vessels which proceed offshore to carry an EPIRB.

Many EPIRBs have an in-built Global Positioning System receiver. When activated these EPIRBs rapidly report the latitude and longitude of the emergency accurate to within 120m. The position of non-GPS EPIRBs is determined by the orbiting satellites, this can take ninety minutes to five hours after activation and is accurate to within 5 km. Marine safety authorities recommend the use of GPS-equipped EPIRBs.

A miniaturised EPIRB capable of being carried in crew members' clothing is called a Personal Locator Beacon (PLB). Regulators do not view them as a substitute for a vessel's EPIRB. In situations with a high risk of "man overboard", such as open ocean yacht racing, PLBs may be required by the event's organisers. PLBs are also often carried during risky outdoor activities upon land.

EPIRBs and PLBs have a unique identification number (UIN or "HexID"). A purchaser should register their EPIRB or PLB with the national search and rescue authority; this is free in most jurisdictions. EPIRB registration allows the authority to alert searchers of the vessel's name, label, type, size and paintwork; to promptly notify next-of-kin; and to quickly resolve inadvertent activations.

A DSC radio distress signal can include the position if the lat/long are manually keyed into the radio or if a GPS-derived position is passed electronically directly into the radio.

A Mayday message consists of the word "mayday" spoken three times in succession, which is the distress signal, followed by the distress message, which should include:

- Name of the vessel or ship in distress
- Her position (actual, last known or estimated expressed in lat./long. or in distance/bearing from a specific location)
- Nature of the vessel distress condition or situation (e.g. on fire, sinking, aground, taking on water, adrift in hazardous waters)
- Number of persons at risk or to be rescued; grave injuries
- Type of assistance needed or being sought
- Any other details to facilitate resolution of the emergency such as actions being taken (e.g. abandoning ship, pumping flood water), estimated available time remaining afloat

In North America, marine search and rescue agencies in Canada and the United States also recognize certain other distress signals:

- Sea marker dye
- White high intensity strobe light flashing at 60 times per minute

A floating man-overboard pole or dan buoy can be used to indicate that a person is in distress in the water and is ordinarily equipped with a yellow and red flag (international code of signals flag "O") and a flashing lamp or strobe light.

There are three levels of emergency and they are announced by different call signs:

- 1) Mayday (repeated three times) is used for 'grave and imminent danger to life or vessel'.
- 2) Pan-pan (repeated three times) is for 'an emergency on board but no immediate danger to anyone's life or to the vessel'.
- 3) Sécurité (repeated three times) is the least urgent and it is used for 'important safety information'. The emergency VHF channel is almost always Channel 16.

a. Vocabulary

To include: man overboard, fire on board, collisions with other vessels and with static objects like jetties, illness and disease on board, piracy, leaking, sinking, damage done by weather, attacks by animals / fish etc.

Match each verb on the left with a definition on the right

to capsize

to collide

to sink

to swamp

to settle

to disappear

to drift

Cannot be seen

Fill with water

Turn over

Go down slowly

Smash together

Go without power

Go under

b. Reading

The aim of this reading exercise is to acquaint students with short messages (2-3 sentence-long) for comprehension, analysis and vocabulary. All the messages are adapted from authentic material so they are examples of reports which an Officer of the Watch might have to read and understand.

Study the three emergency code words below. What do they mean?

Match them with: URGENT call, DISTRESS call and SAFETY call.

- 1) Mayday, Mayday, Mayday
- 2) Pan-pan, Pan-pan, Pan-pan
- 3) Sécurité, Sécurité, Sécurité

Study these sentences

Instruction: You must change to Channel one six.

Stop using Channel one six.

Avoid using Channel one six.

Do not use Channel one six.

Use Channel one six.

Please change to Channel one six.

You may change to Channel one six.

You have permission to use one six.

Complete these sentences:

- 1) Instruction: You _____ go to berth number 5.
- 2) _____ not enter the fairway.
- 3) Affirmative: You _____ now proceed to quay four.
- 4) _____ the fairway now.
- 5) Question: Do I have _____ to proceed?
- 6) Stop. You must _____ proceed.
- 7) _____ immediately. Do not proceed.
- 8) _____ : You must change to channel 16.
- 9) Please _____ interrupting a transmission.

3. Refleksi

Setelah mengikuti kegiatan pembelajaran ini, masing-masing siswa harus mampu menuliskan secara deskriptif atau naratif tentang beberapa hal dibawah ini. (*Gunakan kertas tambahan atau lembar terpisah, apabila perlu*)

1. Apakah anda merasakan manfaat dari pembelajaran ini? Jika Ya, sebutkan apa saja manfaatnya? Jika Tidak, berikan penjelasan?

2. Apa rencana implementasi pengetahuan dan keterampilan dari hasil kegiatan pembelajaran ini.

3. Apa saran dan masukan anda untuk kegiatan pembelajaran selanjutnya.

4. Tugas

A maritime emergency is any serious distress to a vessel or her crew.

- d. (a) Make a list of marine emergencies,
- e. (b) Describe an emergency that you have been in.

5. Tes Formatif

Do this quiz to test your knowledge of marine emergency procedures.

- 1) Which is the vhf channel for emergencies?
- 2) What colour flare signals distress?
- 3) With what code words do you start a call for an urgent safety message?
- 4) What is a Mayday relay?
 - a. when there is more than one emergency
 - b. when you transmit a distress message for another person
 - c. a VHF network
- 5) Who do you send a Mayday call to?
 - a. The coastguard
 - b. The nearest ship
 - c. Everyone

Put the correct form of verbs into the spaces in these sentences.

Example: A minute ago the deck hand _____ under the water. (*disappear*)

Answer: A minute ago the deck hand disappeared under the water.

- 1) _____ We _____ in heavy seas. Please send assistance. (*dri*)
- 2) _____ The waves are too high and the sea
_____ our yacht. (*swamp*)
- 3) _____ This morning we _____ with a tanker but there was
no damage. (*collide*)
- 4) _____ Both vessels _____ now. (*sink*)
- 5) Yesterday the yacht Western Rose _____ off the coast of southern Portugal.
(*capsize*)

C. Penilaian

1. Sikap

Nilai diperoleh dari pengamatan guru terhadap keaktifan siswa selama proses pembelajaran berlangsung

Lembar Penilaian Sikap

No	Nama Siswa	Kriteria Penilaian				Jumlah Skor	Ket.
		Perhatian (1)	Disiplin (2)	Tekun (3)	Aktif Mendengar dan bertanya (4)		
1.							
2.							
3.							
dst							

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
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- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
- 1 = tidak pernah, apabila tidak pernah melakukan.

Pedoman Penskoran :

Skor akhir menggunakan skala 1 sampai 4

Perhitungan skor akhir menggunakan rumus :

$$\text{Nilai akhir} = \frac{\text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Peserta didik memperoleh nilai :

- e. Sangat Baik (SB) : apabila memperoleh skor 3.66 s.d 4.
- f. Baik (B) : apabila memperoleh skor 2.66 s.d 3.65.
- g. Cukup (C) : apabila memperoleh skor 1.66 s.d 2.65.
- h. Kurang (K) : apabila memperoleh skor < 1.65.

2. Pengetahuan

Nilai diperoleh dari Pengamatan selama proses diskusi kelompok, presentasi dan tes tertulis dan penugasan.

Pedoman penilaian :

$$\text{Nilai akhir} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

Nilai untuk Keterampilan menggunakan penilaian kuantitatif 1 – 4 :

Sangat Baik = 4

Baik = 3

Cukup = 2

Kurang = 1

3. Keterampilan

Nilai diperoleh dari penyelesaian tugas (baik individu maupun kelompok) pada saat diskusi dan presentasi (bermain peran/*Role play*).

d. Rubrik kegiatan Diskusi

No	Nama Siswa	Aspek Pengamatan					Jml Skor	Nilai	Ket
		Kerja sama	Mengkomunikasikan pendapat	Toleransi	Keaktifan	Menghargai pendapat teman			
1.									
2.									
3.									
4.									
Dst									

Keterangan Skor :

Kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

- 4 = selalu, apabila selalu melakukan sesuai pernyataan.
- 3 = sering, apabila sering melakukan sesuai pernyataan dan kadang-kadang tidak melakukan.
- 2 = kadang-kadang, apabila kadang-kadang melakukan dan sering tidak melakukan.
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Perhitungan skor akhir menggunakan rumus :

Keterangan Skor :

$$\text{Nilai} = \frac{\sum \text{Skor perolehan}}{\text{Skor Maksimal}} \times 4$$

e. Rubrik Penilaian Presentasi

No	Nama Siswa	Aspek Penilaian						Σ Skor	Nilai	Ket
		Komuni Kasi	Sistematika penyampaian	Wawasan	Keberanian	Antusias	Gesture dan penampilan			
1.										
2.										
3.										
4.										
5.										
Dst										

Keterangan Skor :

kolom diisi dengan kriteria sesuai sikap yang ditampilkan oleh peserta didik, dengan kriteria sebagai berikut :

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Skor akhir menggunakan skala 1 sampai 4

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f. Lembar Pengamatan Bermain Peran

Kelompok /Kelas :

Kegiatan : Bermain peran /*role play*

Tema /KD :

Nama	Aspek Penilaian			Rata-Rata Nilai
	Partisipasi	Penghayatan Peran	Kerjasama	
1.				
2.				
3.				
4.				
5.				
6.				
dst				

Pedoman Penskoran

Aspek Penilaian	Deskripsi	Nilai
Partisipasi	<ul style="list-style-type: none"> Keterlibatan dalam bermain peran Peran dari tokoh yang diperankan 	60 – 100
Penghayatan Peran	<ul style="list-style-type: none"> Penjiwaan terhadap tokoh Kesesuaian kostum tokoh Semangat bermain peran 	60 – 100
Kerjasama	<ul style="list-style-type: none"> Membantu teman Tenggang rasa dengan teman 	60– 100

Kriteria Pencapaian Kompetensi /Ketuntasan Belajar

Aspek				
Pengetahuan 1-4	Predikat	Keterampilan 1-4	Predikat	Sikap SB/ B/ C/ K
Keterangan		KKM Pengetahuan dan Keterampilan KKM \geq 2.66 KKM Sikap : Baik		

Bila tingkat pencapaian kompetensi anda mencapai KKM > 2.66, maka anda dinyatakan tuntas dan dapat melanjutkan ke kegiatan belajar selanjutnya. Tetapi apabila tingkat pencapaian kompetensi anda mencapai KKM < 2.66 maka anda dinyatakan belum tuntas, maka anda harus mengulangi mulai dari kegiatan belajar, terutama pada bagian yang masih belum anda kuasai.

III. PENUTUP

Buku teks Siswa Sekolah Menengah Kejuruan (SMK) yang berjudul “Bahasa Inggris Maritim dan Perikanan” adalah Buku Teks kedua atau lanjutan dari buku teks pertama yang dikhususkan dalam mempelajari bahasa Inggris maritim dan perikanan di jejang sekolah menengah kejuruan. Kehadiran buku ini secara normatif diharapkan dapat bermanfaat bagi peserta didik sebagai sarana pembelajaran dan akan mampu menambah khazanah kekayaan intelektual ilmu pengetahuan kebahasaan asing, khususnya bahasa Inggris, di Indonesia.

Proses pembelajaran yang digunakan dalam buku teks siswa SMK ini mengacu kepada implementasi kurikulum tahun 2013 yang merupakan kurikulum terbaru sistem pendidikan di Republik Indonesia. Secara garis besar proses implementasi pedagogik yang menjadi ruh dalam setiap pembelajaran berbasis kurikulum 2013 menjadi faktor utamanya. Hal ini dibuktikan dengan adanya metode pembelajaran 5 M (Mengamati – Menanya – Mengasosisasi – Mengumpulkan data – Mengkomunikasikan) sebagai landasan sistematis kegiatan belajar mengajar di sekolah. Sementara itu, kegiatan penilaian hasil belajar terkait dengan buku teks ini menggunakan metode penilaian autentik (*authentic assessment*) yang memperlihatkan keseimbangan, baik secara objektif maupun subjektif, akan potensi, kompetensi, keterampilan, dan perilaku/sikap siswa dalam kegiatan belajar mengajar.

Akhirnya, semoga kebermanfaatannya buku teks siswa SMK ini tidak hanya dapat dirasakan oleh siswa dalam kegiatan belajar mengajar di sekolah saja. Akan tetapi juga dapat dirasakan oleh banyak kalangan yang berkesempatan untuk membaca, mengkaji dan mempelajarinya di luar kegiatan belajar mengajar di sekolah. Terutama para praktisi yang berkaitan erat dengan dunia bahasa Inggris serta Kemaritiman dan perkapalan di Indonesia.

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