

## شكراً لتحميلك هذا الملف من موقع المناهج الإماراتية



## حل تجميعة أسئلة القسم الكتابي وفق الهيكل الوزاري انسباير

[موقع المناهج](#) ⇨ [المناهج الإماراتية](#) ⇨ [الصف الرابع](#) ⇨ [علوم](#) ⇨ [الفصل الأول](#) ⇨ [الملف](#)

تاريخ نشر الملف على موقع المناهج: 2023-11-24 10:52:12 | اسم المدرس: Salahuddien Zahra

## التواصل الاجتماعي بحسب الصف الرابع



## روابط مواد الصف الرابع على تلغرام

[الرياضيات](#)

[اللغة الانجليزية](#)

[اللغة العربية](#)

[التربية الاسلامية](#)

## المزيد من الملفات بحسب الصف الرابع والمادة علوم في الفصل الأول

<a href="#">مراجعة شاملة وفق الهيكل الوزاري</a>	1
<a href="#">نموذج الهيكل الوزاري الحديد بريدج</a>	2
<a href="#">أوراق عمل درس الأنظمة في الحيوانات متبوعة بنموذج الحل</a>	3
<a href="#">ورقة عمل درس الأنظمة في الحيوانات</a>	4
<a href="#">حل ملزمة اثرائية مراجعة التقويم الأول</a>	5



Name: .....

Grade 4 \_\_\_\_\_

Science Term-1  
Written Response Exam Preparation  
Grade 4  
2023-2024

16	4-ESS2-2: Analyze and interpret data from maps to describe patterns of Earth's features.		U3M1L1 page 19
17	4-PS4-1: Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move.	Figure page 96	U3M2L2 page 96
18	4-PS3-1: Use evidence to construct an explanation relating the speed of an object to the energy of that object.	Figure page 12	U1M1L1 page12
19	4-ESS2-1: Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.	Figure page 32	U1M1L1 page32
20	4-PS3-3: Ask questions and predict outcomes about the changes in energy that occur when objects collide.		U3M1L3 page 59

Number of MCQ عدد الأسئلة الموضوعية	15
Marks of MCQ درجة الأسئلة الموضوعية	60
Number of FRQ عدد الأسئلة المقالية	5
Marks per FRQ الدرجات للأسئلة المقالية	40
Type of All Questions نوع كافة الأسئلة	الأسئلة الموضوعية / MCQ الأسئلة المقالية / FRQ
Maximum Overall Grade الدرجة القصوى الممكنة	100

Special thanks to- Ms. Zahra Salahuddin

**Instructions: Answer the question by looking at the map.**

**Describe the global pattern of volcanoes and earthquakes that are shown on the world map.**




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**What is a volcano?**

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**What is an earthquake?**

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**Where do most volcanoes occur?**

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**What type of plate motion forms mountains?**

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**What type of plate motion forms mid-ocean ridges?**

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**Instructions: Use the graphic organizer to classify the following features.**

earthquakes	abyssal plains	mountains	volcanoes
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Near Plate Boundaries	Not Near Plate Boundaries

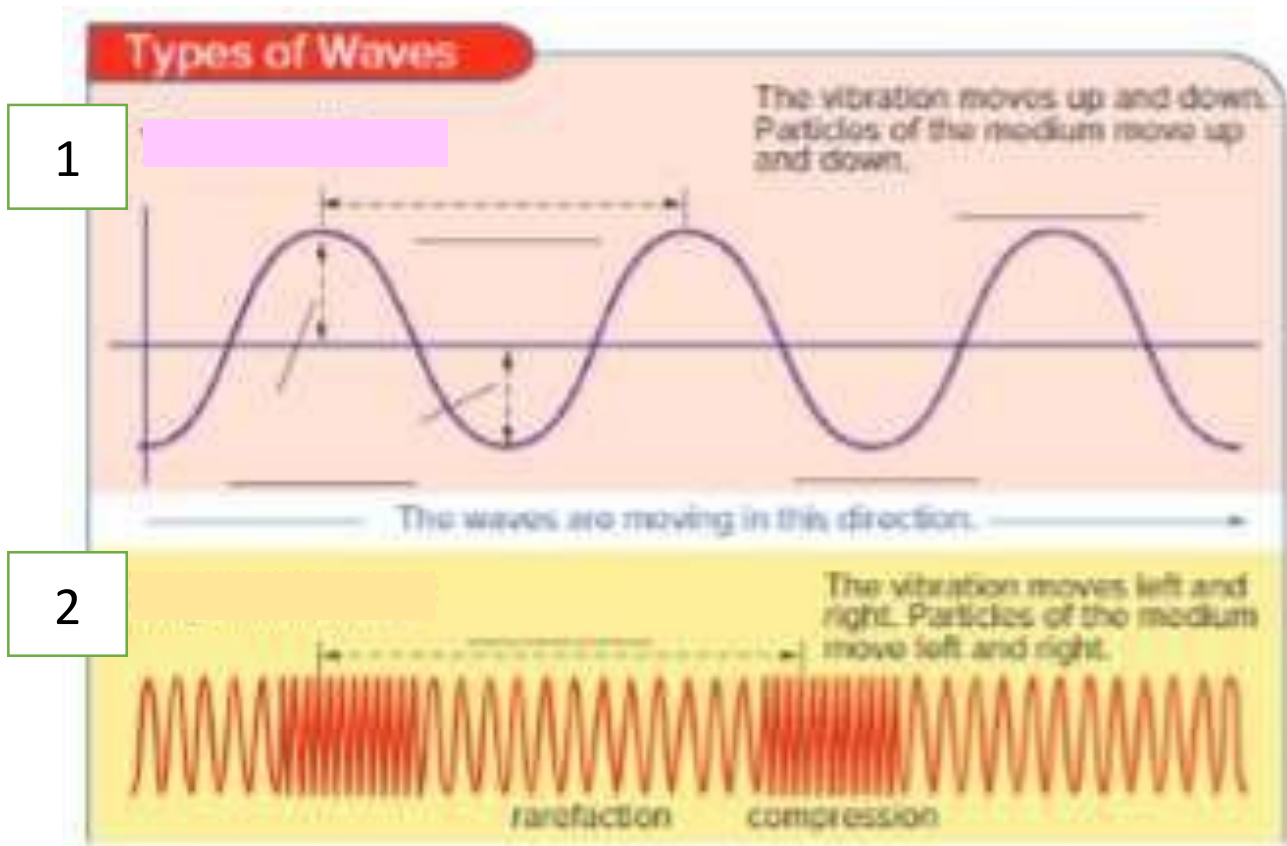
Question 17

- 4-PS4-1: Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move.

U3M2L2 Page  
96

## Label a Diagram: Parts of Waves

Use what you learned to label the wavelength, amplitude, crest, and trough of each wave.

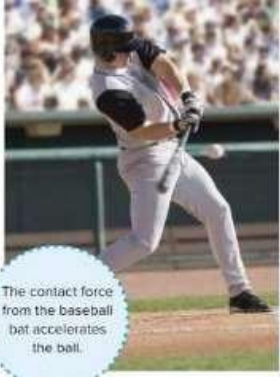


What is wave 1 called? \_\_\_\_\_

What is wave 2 called? \_\_\_\_\_

Question 18 Figure	4-PS3-1: Use evidence to construct an explanation relating the speed of an object to the energy of that object	U1M1L1 Page 12
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**14)** Use the example of a baseball and bat to describe the forces acting on the baseball before and at the moment it comes in contact with the bat.




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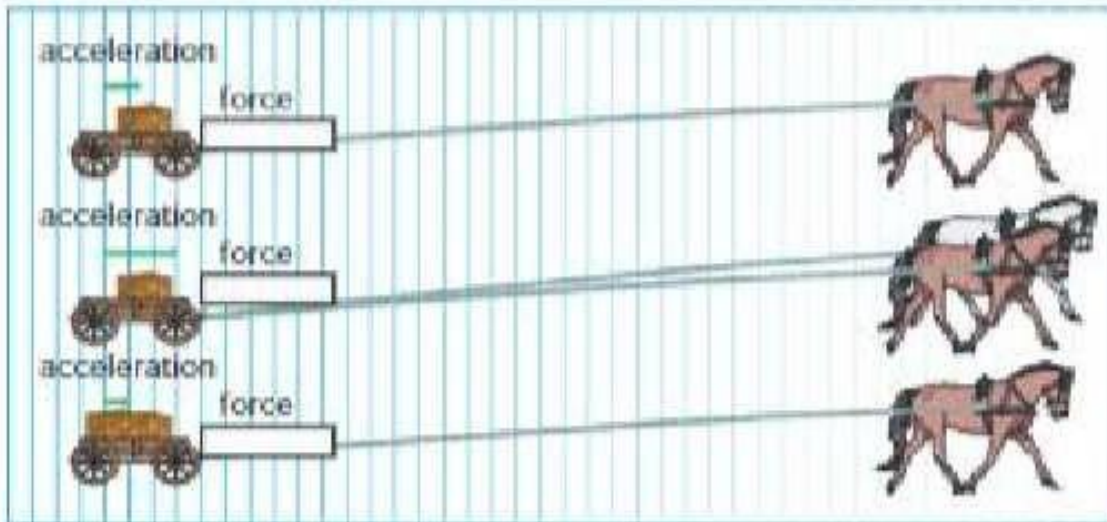
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### Label a Diagram: Force and Acceleration

Use what you learned in the paragraph above to draw arrows that show the acceleration of each cart. Draw a longer arrow to represent greater force and a shorter arrow to represent lesser force.



**Which two factors affect acceleration? Explain.**

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Question 19 Figure	4-ESS2-1: Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.	U1M1L1 Page 32
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### Label a Diagram: Speed and Energy of a Roller Coaster

Write captions for each number on the diagram. Describe the speed, potential energy, and kinetic energy at each point on the roller coaster track.

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

3. \_\_\_\_\_

\_\_\_\_\_



Question 20

4-PS3-3: Ask questions and predict outcomes about the changes in energy that occur when objects collide.

U3M1L3 Page  
59

**1. What can cause changes in the landscape?**

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**2. \_\_\_\_\_ is the process that breaks down material.**

**3. Explain how heavy rainfall can affect the land and living things in an area.**

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**4. What can affect how fast land erodes?**

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Question 20

4-PS3-3: Ask questions and predict outcomes about the changes in energy that occur when objects collide.

U1M1L3 Page  
59

**1. How does the law of conservation of energy apply to a collision?**

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**2. What happens to the stored energy of a toy car when the ramp is raised higher?**

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**3. What would happen if a bowling ball collided with a standing pin? Use the words momentum and energy in your explanation.**

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Question 19 Figure	4-ESS2-1: Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.	U3M1L1 Page 32
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Ammonites lived in water. These fossil ammonites were found on land.



1. What is shown in the image? \_\_\_\_\_

2. What is a fossil? \_\_\_\_\_

\_\_\_\_\_

3. What type of rock was it found in?

\_\_\_\_\_

4. How can this fossil give clues about the past?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. Where do we find older fossils?

\_\_\_\_\_

Question 16

4-ESS2-2: Analyze and interpret data from maps to describe patterns of Earth's features.

U3M1L1 Page 19

Instructions: Answer the question by looking at the map.

Describe the global pattern of volcanoes and earthquakes that are shown on the world map.



Volcanoes and Earthquakes are found near plate boundaries

(2)

What is a volcano?

An opening in Earth's surface

(2)

What is an earthquake?

Sudden moving of Earth's crust

(2)

Where do most volcanoes occur?

Near plate boundaries

(2)

What type of plate motion forms mountains?

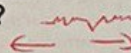
plates push together



(2)

What type of plate motion forms mid-ocean ridges?

plates move away



(2)

Instructions: Use the graphic organizer to classify the following features.

earthquakes	<u>abyssal plains</u>	mountains	volcanoes
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only one NOT

Near Plate Boundaries	Not Near Plate Boundaries
earthquakes mountains volcanoes	abyssal plains

(8)



Question 19 Figure	4-ESS2-1: Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.	U3M1L1 Page 32
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Ammonites lived in water. These fossil ammonites were found on land.



1. What is shown in the image? Fossils
2. What is a fossil? The remains of living things from the past
3. What type of rock was it found in? sedimentary rock
4. How can this fossil give clues about the past? It tells us the land was once covered in water. Environment has changed
5. Where do we find older fossils? Lower down.



1. What can cause changes in the landscape?

physical weathering  
chemical weathering  
living things

2. Weathering is the process that breaks down material.

3. Explain how heavy rainfall can affect the land and living things in an area.

Can cause more erosion.  
Can destroy/break animals  
homes and food sources

4. What can affect how fast land erodes?

- Slope of land  
- natural disasters - amount of rain  
- vegetation

(8)



14) Use the example of a baseball and bat to describe the forces acting on the baseball before and at the moment it comes in contact with the bat.

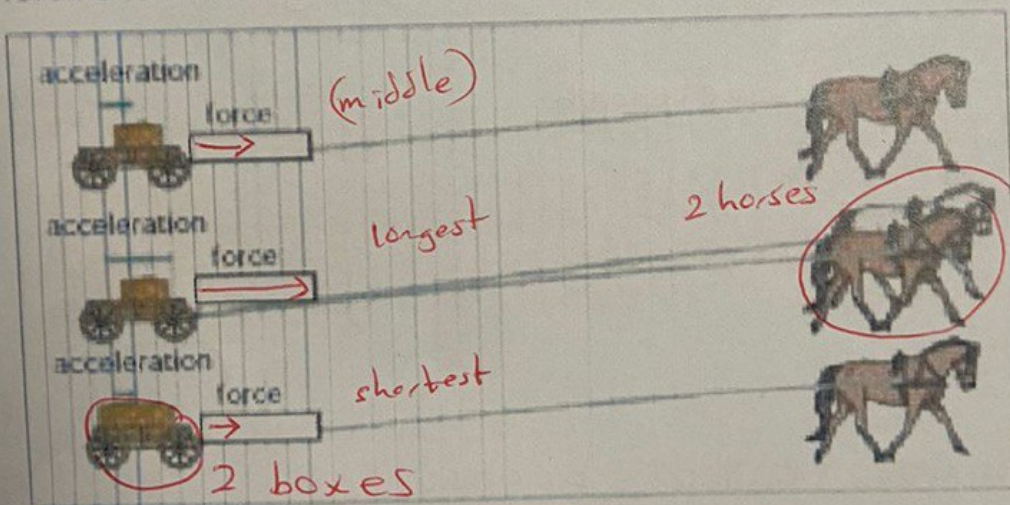


Before hitting bat, unbalanced force and gravity act on ball, after, it has contact force of bat.

(8)

### Label a Diagram: Force and Acceleration

Use what you learned in the paragraph above to draw arrows that show the acceleration of each cart. Draw a longer arrow to represent greater force and a shorter arrow to represent lesser force.



\* Draw longest and shortest first. Then middle size

Which two factors affect acceleration? Explain.

Mass and Force. More force = more acceleration.

More mass = less acceleration.

(8)



1. How does the law of conservation of energy apply to a collision?

Energy cannot be created or destroyed.  
It can be transferred or transformed.

In collision kinetic energy is transformed into heat and sound.

2. What happens to the stored energy of a toy car when the ramp is raised higher?

Toy cars stored / potential energy is increased.

3. What would happen if a bowling ball collided with a standing pin? Use the words momentum and energy in your explanation.

The bowling ball has <sup>more</sup> momentum.

It will transfer its energy to the pin and knock it down.

(8)



Question 19 Figure

4-ESS2-1: Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.



Label a Diagram: Speed and Energy of a Roller Coaster

Write captions for each number on the diagram. Describe the speed, potential energy, and kinetic energy at each point on the roller coaster track.

1. Potential energy high.

2. Potential energy becomes less

Kinetic energy becomes more, speed is more

3. Kinetic and potential energy

become less as it stops. (8)



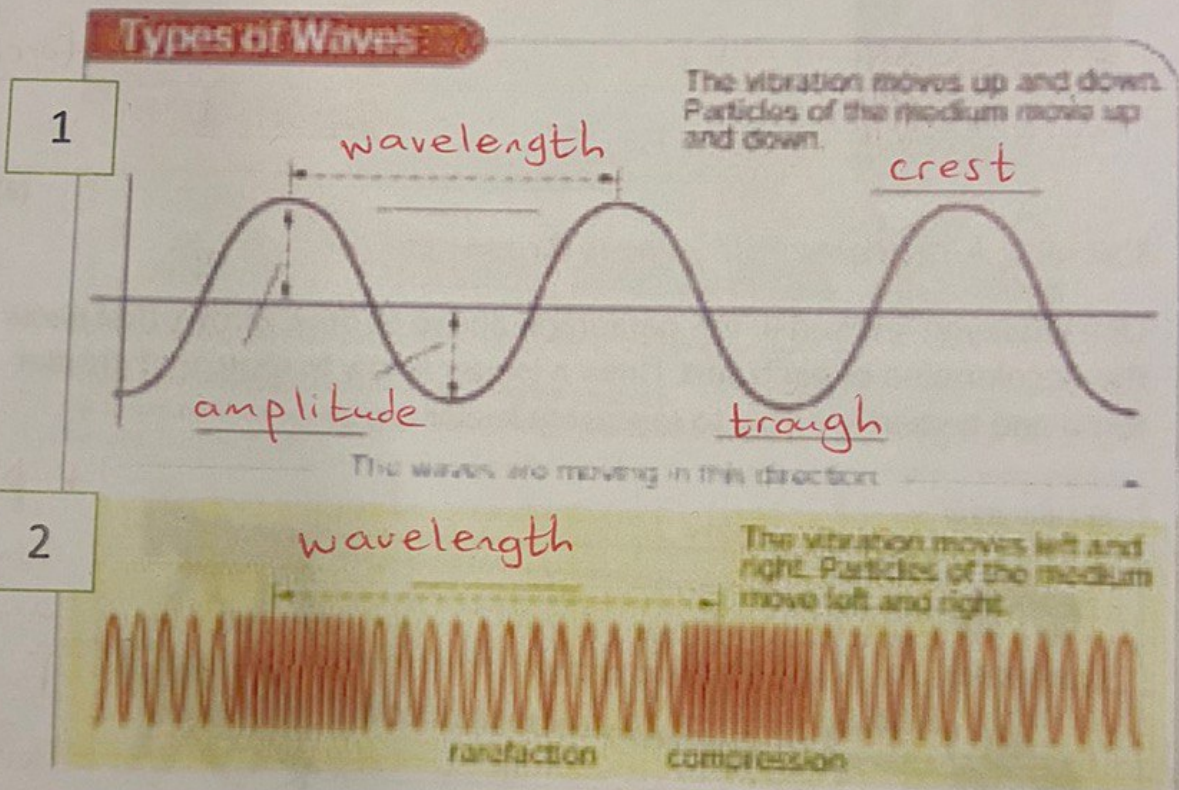
Question 17

- 4-PS4-1: Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move.

U3M2L2 Page 96

### Label a Diagram: Parts of Waves

Use what you learned to label the wavelength, amplitude, crest, and trough of each wave.



- What is wave 1 called? transverse (5)
- What is wave 2 called? longitudinal (2)