

8th Grade Science Mid-Term Form 4

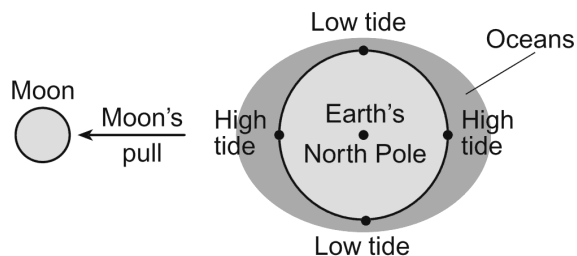
Name: _____

Date: _____

1. Earth gets most of its light from

- A. the Moon
- B. other planets
- C. the stars
- D. the Sun

2. The diagram below represents high and low ocean tides on Earth that are caused by the gravitational attraction of the Moon on Earth's oceans.

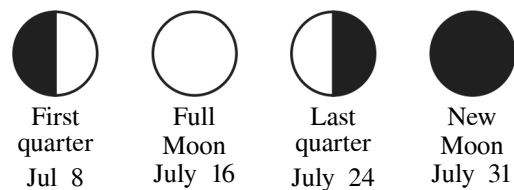


(Not drawn to scale)

Due to Earth's rotation, the approximate amount of time between two consecutive high tides is

- A. 6 hours
- B. 12 hours
- C. 48 hours
- D. 24 hours

3. The diagram below shows four Moon phases observed during July.



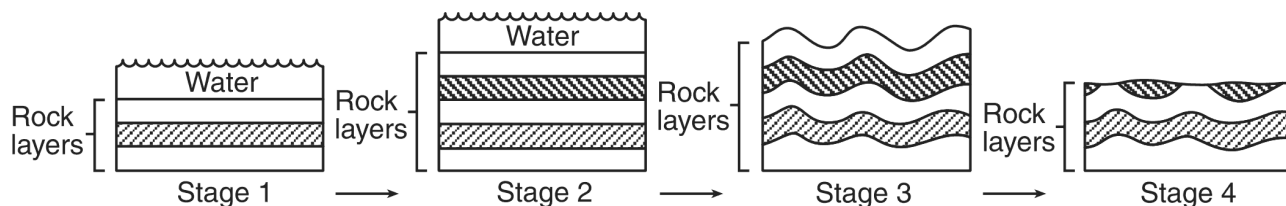
On which date would the next New Moon occur?

- A. August 10
- B. August 19
- C. August 5
- D. August 29

4. Which two properties would be best used for the identification of an unknown compound?

- A. solubility and density
- B. conductivity and size
- C. mass and temperature
- D. length and height

5. The diagram below shows stages in the development of a certain landscape.

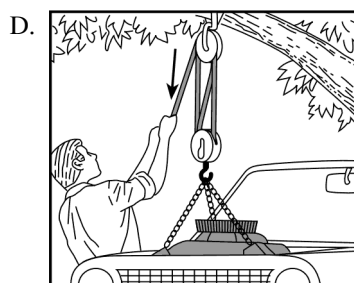
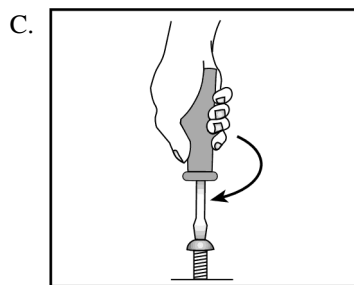
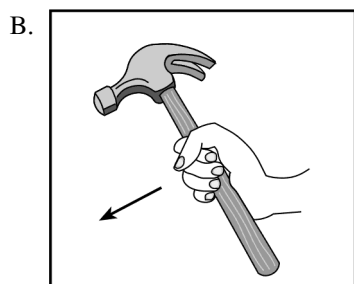
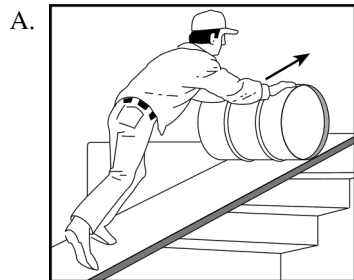


When did erosion become the most dominant process in the development of the landscape shown in stage 4?

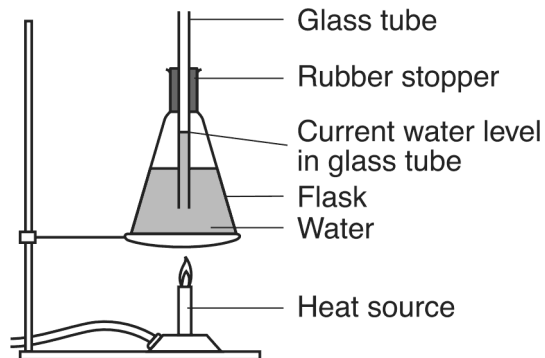
- A. at stage 2
- B. at stage 1
- C. between stages 2 and 3
- D. between stages 3 and 4

6. The diagrams below represent four simple machines. The arrows in each diagram indicate the direction of the force being applied.

Which machine is changing the direction of the force being applied by the person?



7. The diagram below shows water being heated in a flask. The flask has a rubber stopper with a glass tube extending through it. The current level of the water in the glass tube is indicated. The temperature of the water is 25°C .



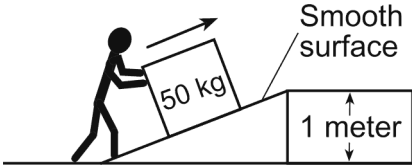
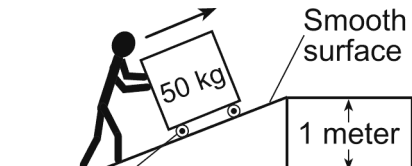
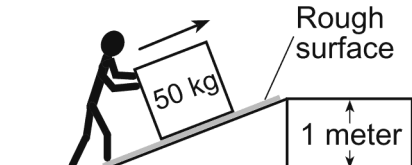
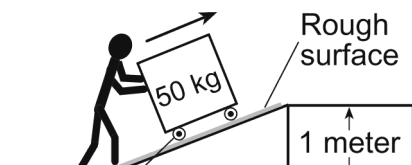
If heating continues, the water in the glass tube will most likely

- A. turn into a solid
 - B. rise higher in the tube
 - C. become more dense
 - D. move into the flask
8. Infections may be caused by
- A. climate changes
 - B. toxic substances
 - C. mutations
 - D. microorganisms
9. Approximately how long does it take for an observer on Earth to view a complete cycle of Moon phases?
- A. 12 hours
 - B. 1 month
 - C. 24 hours
 - D. 1 year

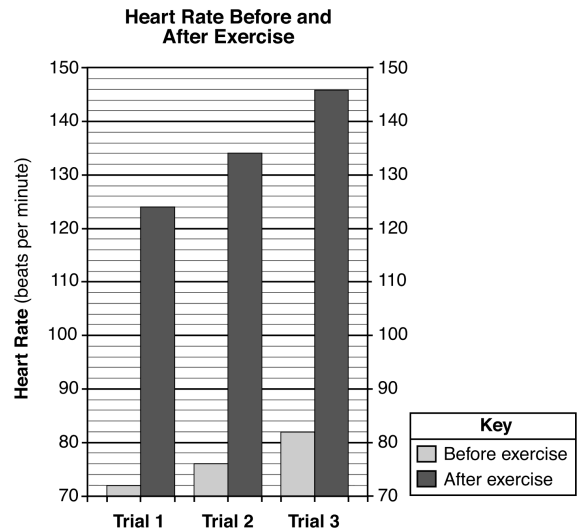
10. The characteristic weather that prevails from season to season in a region is defined as

- A. an air pressure system
- B. the climate
- C. a front
- D. an air mass

11. In which diagram would the force required to move the object up the ramp be the greatest?

- A. 
- B. 
- C. 
- D. 

12. The graph below shows the results of an experiment in which a student measured her heart rate in beats per minute (bpm) before and after five minutes of exercise. The experiment was repeated three times, with two minutes of rest in between each trial.



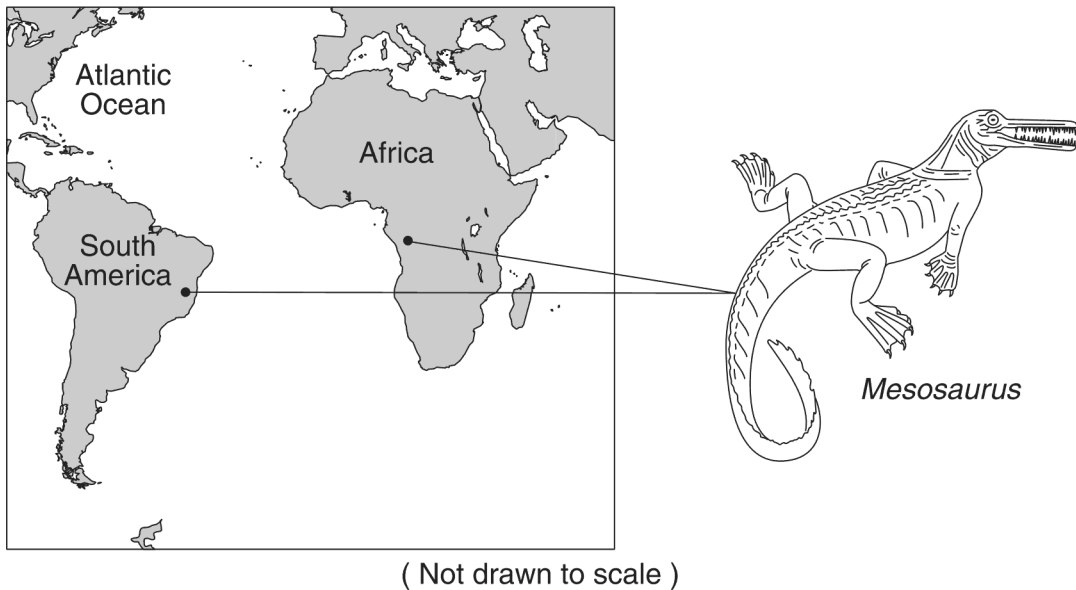
Which conclusion about heart rate can be supported by the data shown in the graph?

- A. The before-exercise heart rate in trial 2 was 78 bpm.
- B. The heart rate went up 64 bpm after exercise in trial 3.
- C. The before-exercise heart rate increased 6 bpm after each trial.
- D. The heart rate after exercise increased 10 bpm after each trial.

13. Nutrients enter the bloodstream during the process of

- A. locomotion
- B. absorption
- C. respiration
- D. elimination

14. The diagram below shows two locations where fossils of *Mesosaurus* have been found. *Mesosaurus* was a freshwater reptile that existed on Earth about 250 years ago.



Which statement best explains why these freshwater *Mesosaurus* fossils are found today in some rock layers in both South America and Africa?

- A. The remains of *Mesosaurus* were carried across the ocean by predators.
- B. Global warming has been raising the sea level in the Atlantic Ocean.
- C. *Mesosaurus* swam across the ocean between the continents.
- D. The continents were once connected as a single landmass.

8th Grade Science Mid-Term Form 4 2/5/2025

- | | | | |
|------------|---------------|------------|---------------|
| 1. | | 13. | |
| Answer: | D | Answer: | B |
| Points: | 1 | Objective: | NYS I.LE.1.2c |
| | | Points: | 1 |
| 2. | | 14. | |
| Answer: | B | Answer: | D |
| Points: | 1 | Objective: | NYS I.PS.2.2d |
| | | Points: | 1 |
| 3. | | | |
| Answer: | D | | |
| Objective: | NYS I.PS.1.1g | | |
| Points: | 1 | | |
| 4. | | | |
| Answer: | A | | |
| Points: | 1 | | |
| 5. | | | |
| Answer: | D | | |
| Objective: | NYS I.PS.2.1i | | |
| Points: | 1 | | |
| 6. | | | |
| Answer: | D | | |
| Objective: | NYS I.PS.5.2f | | |
| Points: | 1 | | |
| 7. | | | |
| Answer: | B | | |
| Objective: | NYS I.PS.4.2d | | |
| Points: | 1 | | |
| 8. | | | |
| Answer: | D | | |
| Objective: | NYS I.LE.1.2j | | |
| Points: | 1 | | |
| 9. | | | |
| Answer: | B | | |
| Objective: | NYS I.PS.1.1g | | |
| Points: | 1 | | |
| 10. | | | |
| Answer: | B | | |
| Points: | 1 | | |
| 11. | | | |
| Answer: | C | | |
| Points: | 1 | | |
| 12. | | | |
| Answer: | B | | |
| Points: | 1 | | |