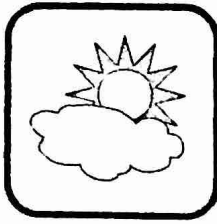


Released Items



EOG Review # 1

Student Name: _____

Fall 2014
NC Final Exam
Grade 7 Science



Student Booklet

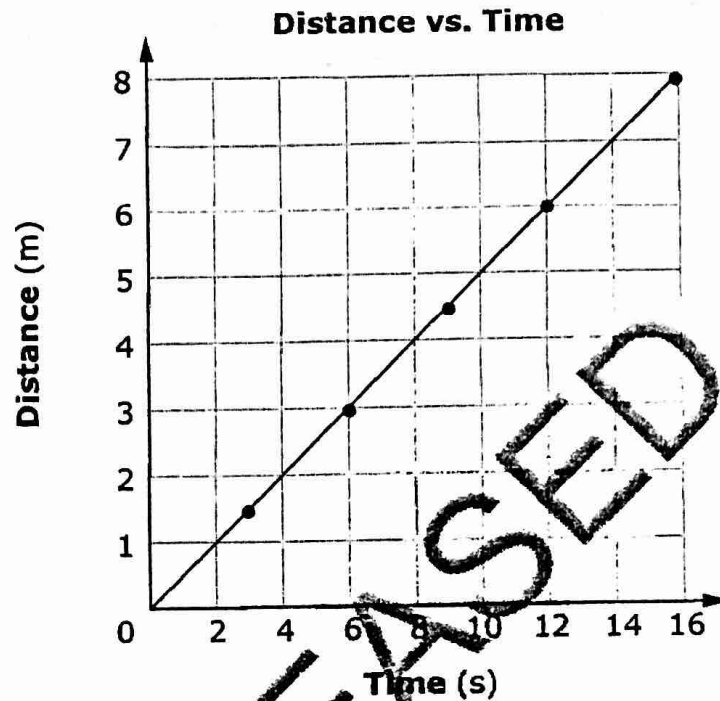


Public Schools of North Carolina
State Board of Education
Department of Public Instruction
Raleigh, North Carolina 27699-6314

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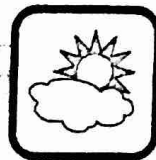


- 1 Sally ran a distance of 8 m in 16 s. The graph below shows her motion.



Which **best** describes her motion?

- A Her speed was constantly changing.
- B Her speed remained constant.
- C She stopped moving after four seconds.
- D She decreased her speed after four seconds.



- 2 How does the energy of a roller-coaster cart change as the cart travels from the top of the roller coaster to the bottom?
- A The cart has greater kinetic energy at the top than it does at the bottom.
 - B The cart has no energy at the top and more energy at the bottom.
 - C The cart has less potential energy at the top than it does at the bottom.
 - D The cart has potential energy at the top that is transformed to kinetic energy as it moves to the bottom.
- 3 How can simple machines make work easier?
- A by decreasing the force needed to complete the task
 - B by increasing the friction between the machine and the object
 - C by adding more work on the object than originally applied
 - D by removing the force of gravity on the object
- 4 Why does the troposphere experience the greatest amount of atmospheric pressure compared to the other atmospheric layers?
- A It produces the ozone layer.
 - B It has the highest temperatures.
 - C It contains a high concentration of gas particles.
 - D It is the region in which weather occurs.



- 5 Which explains why most of the rain that falls comes from the ocean?
- A The majority of evaporation takes place over the ocean.
 - B The majority of precipitation takes place over the ocean.
 - C Most rivers deposit freshwater into the ocean.
 - D Most clouds form near or over the ocean.
- 6 Barometric pressure has been dropping all day. What weather conditions will **most likely** occur?
- A sunny weather
 - B stormy weather
 - C calm weather
 - D hot weather
- 7 A sea breeze blows from the ocean toward the shore. Why does this occur?
- A High pressure over the land causes a downdraft to occur.
 - B The tide carries the wind to the shore as it moves back and forth.
 - C Conduction of heat from the warm water produces wind from the ocean.
 - D Air over land heats faster than air over water, which causes convection.



- 8 Which two organisms contain chloroplasts and eyespots?
- A amoeba and paramecium
 - B paramecium and volvox
 - C volvox and euglena
 - D euglena and amoeba
- 9 How do a paramecium and an amoeba obtain food to live?
- A A paramecium and an amoeba both use contractile vacuoles to capture food.
 - B A paramecium and an amoeba both make their own food through photosynthesis.
 - C A paramecium collects food into an oral groove, while an amoeba uses pseudopods to surround food.
 - D A paramecium uses pseudopods to capture food, while an amoeba uses chloroplasts to make its food.
- 10 Tina observed a cell under a microscope. She concluded that it was a plant cell instead of an animal cell. Which structure helped her come to this conclusion?
- A She saw a vacuole, which animal cells lack.
 - B She saw a nucleus, which animal cells lack.
 - C She saw a chloroplast, which animal cells lack.
 - D She saw a cell membrane, which animal cells lack.



- 11 Which is a function of the respiratory system?
- A to provide the body with carbon dioxide, which reacts with food to produce energy
 - B to provide the body with oxygen, which reacts with food to produce energy
 - C to provide the cells with glucose, which is used as a source of energy
 - D to provide the cells with water, which is used as a source of energy
- 12 Why would the offspring resulting from fertilization have more differences than the offspring resulting from budding?
- A Two parents provide all of their genes to their offspring during budding, unlike during fertilization.
 - B Each parent provides half of its genes to its offspring during budding, unlike during fertilization.
 - C Two parents provide all of their genes to their offspring during fertilization, unlike during budding.
 - D Each parent provides half of its genes to its offspring during fertilization, unlike during budding.

RELEASED



- 13 Freckles (F) are dominant to not having freckles (f). The diagram shows the cross of a homozygous dominant parent (FF) with a parent of an unknown genotype for freckles.

	F	F
?	Ff	Ff
?	Ff	Ff

What is the unknown genotype and phenotype for the parent?

- A homozygous dominant with freckles
 B homozygous recessive without freckles
 C heterozygous with freckles
 D heterozygous without freckles
- 14 Two black guinea pigs were crossed and they produced a litter of 4 black and 3 white guinea pigs. Which **best** explains this occurrence?
- A White fur is dominant to black fur.
 B White fur was the result of a mutation.
 C Both parents were heterozygous for black fur.
 D Both parents were homozygous for black fur.