

GRADE 8 SCIENCE

RELEASED ITEMS WINTER 2000

3. Eye color is a trait that two parents could pass on to their children even though the trait might not be expressed in the parents. Such a trait is considered to be

- A acquired.
- B inherited.
- C neutral.
- D positive.

6. Digestion is a

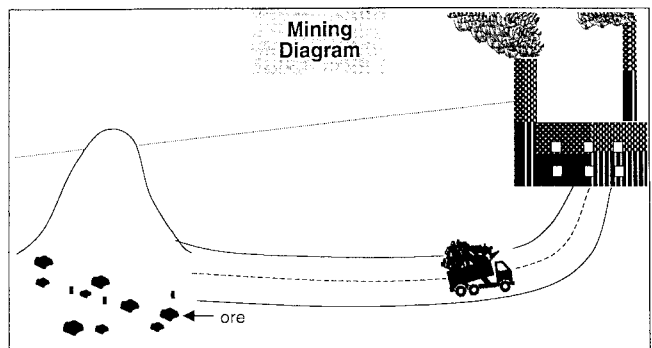
- A reversible change of food.
- B physical change of food only.
- C chemical change of food only.
- D chemical and physical change of food.

17 Steven filled an ice tray nearly full with water. When he took the tray out of the freezer, the ice extended above the top of the tray. He wondered if there had been a change in the amount of substance in the tray. Which is the BEST measure to find any change in the amount of substance in the ice tray?

- A mass
- B volume
- C area
- D density

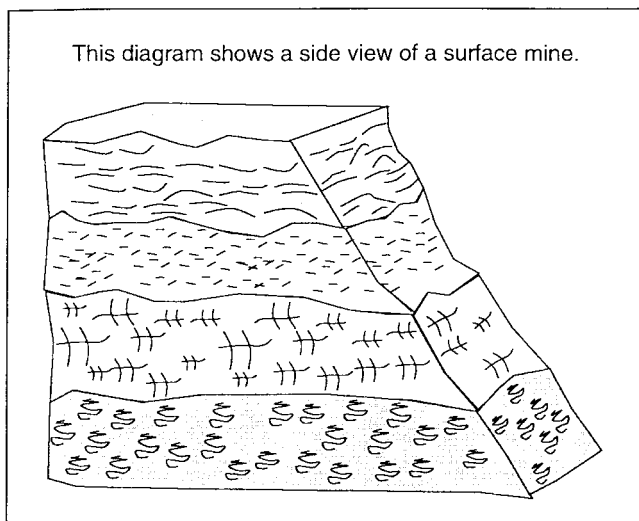
22 Kari's class was investigating how a powdered drink mix dissolves in water of different temperatures. They needed to determine how much mix would dissolve in a given sample of water. Which would be the **BEST** procedure?

- A Add heaping teaspoons of mix until no more dissolves. Count the number of heaping teaspoons used.
- B Measure the mass of mix before and after shaking small amounts into the water until no more will dissolve. Calculate the difference.
- C Shake a little bit in at a time until no more will dissolve. Count the number of shakes.
- D Add three packages of mix to the water. See how much of it dissolves.



This is a diagram showing three of the stages involved in mining. First, valuable ores are removed from the mine. Next, trucks transport the ore to a factory. Finally, the ore is processed in the factory so it can be used by humans for a variety of needs.

- 55 Which one of the following is a chemical change occurring in the above diagram?
- A The factory processes the ore and produces smoke.
 - B Large rocks are broken down into small piles of ore.
 - C A road is worn out between the mine and the factory.
 - D Dust particles rise from the back of the truck as it rides down the road.
- 56 An environmental organization wants to investigate the effects of this mine on the local wildlife. Which one of the following tests will be **MOST** useful in its investigation?
- A Measure the heights of the largest trees in the area.
 - B Calculate the amount of pollution produced by the factory in one day.
 - C Determine what the population of local animals was before the mine was created.
 - D Compare the change in population of local animals before and after the mine was created.



- This diagram shows a side view of a surface mine.
- 57 How might the rocks in the above diagram be useful in studying the evolution of life in the surrounding area?
- A They may contain fossils which can be compared to the age of the rocks.
 - B There may be bones of modern-day animals mixed in with the rock piles.
 - C Building the mine may have caused local animals to move to a new environment.
 - D When the mine is abandoned, new animals may move in to the area and can be studied.
- 58 Surface mining can have negative effects on the environment around the mine. Which one of the following is **MOST LIKELY** to be a negative environmental effect of surface mining?
- A increase in gasoline prices
 - B increase in local economy
 - C destruction of animal habitat
 - D destruction of mining equipment
- 59 Pollution of air and water can also be caused in natural ways. What is one natural source of pollution?
- A factories
 - B recycling
 - C automobiles
 - D volcanoes
- 60 Explain two ways that air pollution is caused by changes in matter. For each way, explain what substance is being changed and what it is being changed into.

ANSWER THIS ITEM IN YOUR ANSWER BOOKLET. NOTHING WRITTEN IN THE SPACE BELOW WILL BE SCORED.

Key

3-B, 6-D, 17-A, 22-B, 55-A, 56-D, 57-A, 58-C, 59-D