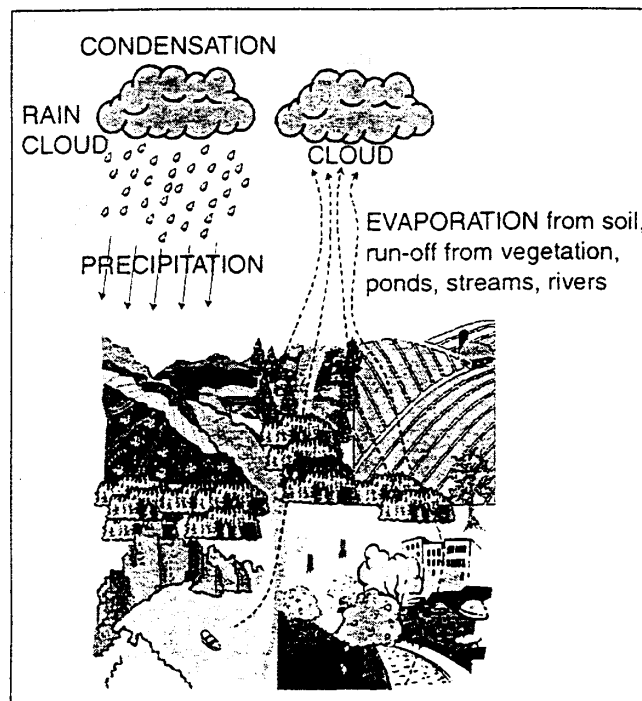

RELEASED MEAP 2002 ITEMS
8th Grade Science

8th Grade Science

- 1 Rock layers may be forced deep underground and exposed to high temperatures and pressures. These rocks change and become
- A rare metals.
 - B igneous rock.
 - C sedimentary rock.
 - D metamorphic rock.
2. In Michigan, the amount of water vapor in the air depends mostly on the
- A speed of the wind.
 - B temperature of the air.
 - C amount of oxygen in the air.
 - D shape of the clouds in the sky.

Use the information below to answer questions 8 through 11.

Over 70 percent of Earth's surface is covered with water. Water comes from many difference sources and exists in many different forms.



-
- 8** The picture on page 6 shows the water cycle on Earth. What can be concluded from this cycle?
- A** Water remains in a constant state.
 - B** Water only exists as a liquid on Earth.
 - C** Water is constantly moving and changing.
 - D** Water in the atmosphere does not return to Earth.
- 9** Water exists on Earth in three different physical states. Which of the following are forms of solid water on Earth?
- A** ice and rain
 - B** fog and rivers
 - C** glaciers and hail
 - D** water vapor and snow
- 10** Sewage treatment plants have many benefits for the environment. What negative impact could occur at these facilities during heavy rainfall?
- A** These facilities could overload, releasing pollution into the river.
 - B** These facilities reduce evaporation of water from the river.
 - C** These facilities can reduce the water level of the river.
 - D** These facilities will attract more visitors to the river for recreational purposes.

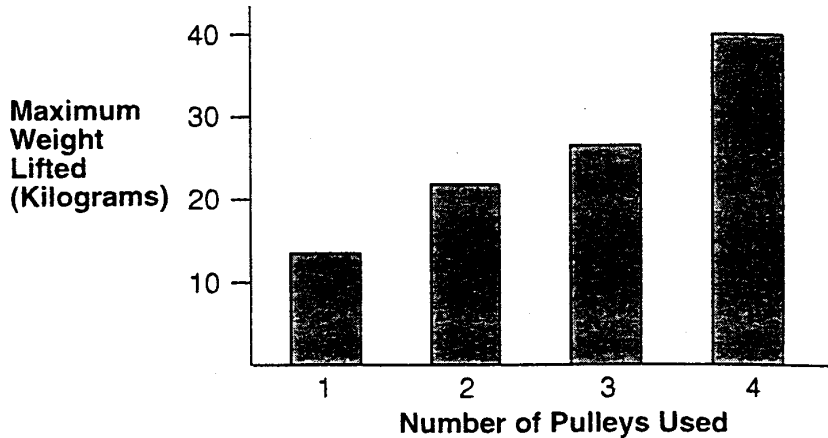
11 3 points

When winter is over in Michigan, snow and ice begin to melt. Describe three things that can happen to this water.

ANSWER THIS ITEM IN YOUR ANSWER BOOKLET.

NOTHING WRITTEN IN THIS TEST BOOKLET WILL BE SCORED.

13



The person using the pulleys decided that four pulleys can lift four times as much weight as one pulley. Do the data support this claim?

- A Yes, because one pulley lifted 10 kilograms.
 - B No, because four pulleys lifted only 40 kilograms.
 - C Yes, because four pulleys lifted the most amount of weight.
 - D No, because there was no data to show how much can be lifted by four pulleys.
- 16 Juan's class was investigating how fast ice cubes melt at different locations in the room. Which would be the BEST way to select ice cubes to use?
- A Measure the mass of several cubes and choose the ones that have the greatest mass.
 - B Take ice cubes from the same bag.
 - C Choose ice cubes that look about the same size.
 - D Measure the mass of several cubes and choose the ones that are closest in mass.
- 22 What must be true for a car to move forward at a constant speed? The forward force of the car is
- A increasing at a constant rate.
 - B greater than the force of gravity.
 - C balanced with the force of friction.
 - D greater than the backward force on the car.
- 42 A slow but gradual change in an ecosystem is
- A succession.
 - B habitation.
 - C biotic evolution.
 - D climax community.

-
- 43 Technology is the use and development of scientific knowledge for practical purposes. A person studying technology would say that
- A technology has advantages and disadvantages.
 - B all technology has advantages.
 - C all technology makes the world a better place.
 - D all technology has disadvantages.
- 44 Which of the following describes systems that must work together to bring oxygen to a muscle?
- I. digestion
 - II. respiration
 - III. circulation
 - IV. reproduction
- A I,II
 - B II, III
 - C III, IV
 - D I, IV
- 48 When the weather is cold, bees do not leave their hives. This is because they are
- A warm-blooded vertebrates.
 - B warm-blooded invertebrates.
 - C cold-blooded vertebrates.
 - D cold-blooded invertebrates.
49. The part of the flower that contains the ovary is called the pistil. If the pistil is removed, the plant CANNOT produce
- A seeds
 - B petals
 - C leaves
 - D pollen

Key to MEAP 8th Grade on next page

Key to MEAP 8th Grade

Item	Benchmark	Answer
1	V.1.m.2	D
2	V.3.m.1	B
8	V.3.m.3	C
9	V.2.m.1	C
10	V.2.m.4	A
11	V.2.m.2	constructed
13	II.1.m.1	B
16	I.1.m.4	D
22	IV.3.m.2	C
42	III.5.m.4	A
43	II.1.m.4	A
44	III.2.m.4	B
48	III.2.m.1	D
49	III.2.m.4	A