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My initials:		
FIRST	MIDDLE	LAST
A	A	A
B	B	B
C	C	C
D	D	D
E	E	E
F	F	F
G	G	G
H	H	H
I	I	I
J	J	J
K	K	K
L	L	L
M	M	M
N	N	N
O	O	O
P	P	P
Q	Q	Q
R	R	R
S	S	S
T	T	T
U	U	U
V	V	V
W	W	W
X	X	X
Y	Y	Y
Z	Z	Z

I am a:

Girl

Boy

I was born in:

MONTH BORN
<input type="radio"/> January
<input type="radio"/> February
<input type="radio"/> March
<input type="radio"/> April
<input type="radio"/> May
<input type="radio"/> June
<input type="radio"/> July
<input type="radio"/> August
<input type="radio"/> September
<input type="radio"/> October
<input type="radio"/> November
<input type="radio"/> December

Today the date is:

MONTH	DAY	YEAR
<input type="radio"/> January		<input type="radio"/> 2010
<input type="radio"/> February		<input type="radio"/> 2011
<input type="radio"/> March	0	<input type="radio"/> 2012
<input type="radio"/> April	1	<input type="radio"/> 2013
<input type="radio"/> May	2	<input type="radio"/> 2014
<input type="radio"/> June	3	<input type="radio"/> 2015
<input type="radio"/> July		<input type="radio"/> 2016
<input type="radio"/> August		
<input type="radio"/> September		
<input type="radio"/> October		
<input type="radio"/> November		
<input type="radio"/> December		

Marking Instructions

- Use a No. 2 pencil or a blue or black ink pen only.
- Do not use pens with ink that soaks through the paper.
- Make solid marks that fill the response completely.
- Make no stray marks on this form.

CORRECT: ●

INCORRECT: ○ ⊗ ⊘ ⊙

For each question below, fill in the bubble for the **BEST** answer.

1. Choose the BEST answer. An environmental engineer:

- A Repairs trucks, airplanes, and cars.
- B Solves air, soil, and water problems.
- C Designs bridges, roads, and tunnels.
- D Improves cell phones, computers, and televisions.

2. What might an environmental engineer do for his or her job?

- A Study what whales eat.
- B Design vegetable gardens.
- C Find ways to clean up an oil spill.
- D Drive machines to cut down trees.

3. On a hot and sunny day, a boy poured a glass of cold water. A few minutes later, the glass was wet and slippery on the outside. How did the water get there?

- A It rained.
- B It condensed.
- C It evaporated.
- D It leaked through the glass.

PLEASE DO NOT WRITE IN THIS AREA



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4. What is an environmental engineer MOST LIKELY to do for her job?

- (A) Create new kinds of fuels.
- (B) Take care of wild animals.
- (C) Develop man-made lakes and streams.
- (D) Prevent damage to land, water, and seas.

5. At work, an environmental engineer is MOST LIKELY to:

- (A) Test soil for contaminants.
- (B) Design electric engines for boats.
- (C) Design a new habitat for animals.
- (D) Pick up glass, paper, and plastic for recycling.

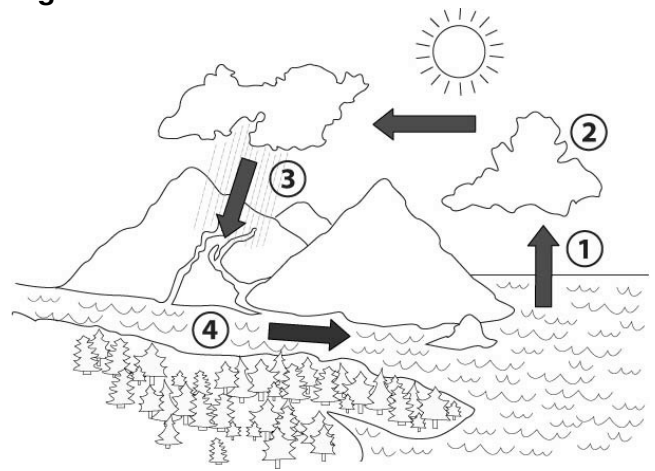
6. Which is an environmental engineer MOST LIKELY to design?

- (A) A zoo.
- (B) A garden.
- (C) A way to clean water.
- (D) Computer-controlled boats.

7. Why is it important to stop pollution of the soil?

- (A) Animals that live in the soil might die.
- (B) Humans eat plants that have grown in the soil.
- (C) When water flows through polluted soil it might become polluted.
- (D) All of the above are reasons why it is important to stop pollution of soil.

Use the following diagram to answer questions 8 through 11.



8. Which change is occurring at stage 1 in the diagram?

- (A) Water is changing from a gas to a solid.
- (B) Water is changing from a liquid to a gas.
- (C) Water is changing from a solid to a liquid.
- (D) Water is changing from a liquid to a solid.

9. Where in the diagram is evaporation taking place?

- (A) At 1
- (B) At 2
- (C) At 3
- (D) At 4

10. Where in the diagram is condensation taking place?

- (A) At 1
- (B) At 2
- (C) At 3
- (D) At 4

11. Where in the diagram is precipitation taking place?

- (A) At 1
- (B) At 2
- (C) At 3
- (D) At 4

12. Which of the following filters would work BEST to QUICKLY remove large leaves from water? A filter made of:

- (A) Sand
- (B) Paper
- (C) Cotton balls
- (D) Metal screen

13. Which of the following could become water pollution?
- A Waste from farm animals
 - B Oil spilled by broken machines
 - C Fertilizer that people put on grass to make it grow
 - D All of the above
14. What does an environmental engineer think about?
- A How to protect habitats.
 - B How to prevent pollution.
 - C How to make water safe for people to drink.
 - D All of the above.
15. Which of the following is LEAST LIKELY to be the job of an environmental engineer?
- A Designing a technology to clean up pollution
 - B Figuring out where soil pollution is coming from
 - C Running and repairing a machine that cleans up pollution
 - D Helping a town figure out how to clean up river pollution
16. A lake becomes polluted. What living things are affected by the dirty water in the lake?
- A The plants around the lake
 - B The fish that live in the lake
 - C The people who live near the lake
 - D All of the above

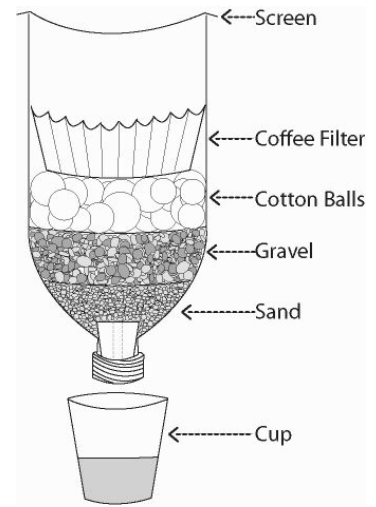
17. Which of these is LEAST LIKELY to contaminate water?
- A Dirt
 - B Trash
 - C Dog droppings
 - D Soap from washing clothes
18. What could add pollution to the soil?
- A Factories
 - B Parking lots
 - C Farm animals
 - D All of the above
19. Which of the following could add contaminants to water?
- A Dogs
 - B Birds
 - C Boats
 - D All of the above
-
- A girl has designed a water filter using a metal screen. She wants to clean brown water with lots of small particles floating in it. She pours the dirty water through, but it does not change.
20. What would be the BEST thing she could do to remove the small particles?
- A Scoop out the particles with a spoon.
 - B Use a filter material with larger holes.
 - C Use a filter material with smaller holes.
 - D It is not possible to remove the small particles.
21. What would be the BEST thing she could do to remove the brown color?
- A Clean the water with soap.
 - B Use a filter material that is softer.
 - C Use a filter material with smaller holes.
 - D It is not possible to remove the brown color.

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22. Two students make a water filter. A diagram of their filter is shown below. They pour murky brown water with leaves in it into the top of their filter. The leaves don't come through, but the water that comes out is still brown. What is the MOST LIKELY problem?

- (A) Only chemicals can remove color from water.
- (B) A filter can NOT change the color of the water.
- (C) The filter is not catching things that are very tiny.
- (D) The sand in the filter is turning the water brown again.

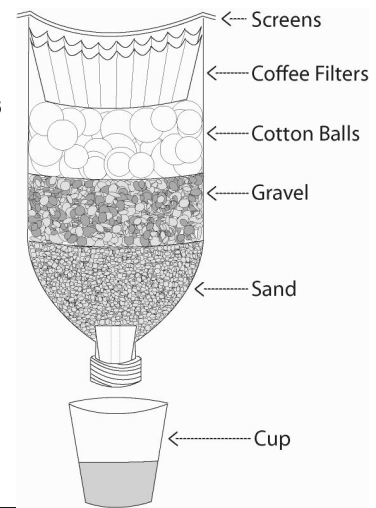


23. What can the students do to help get the brown color out of the water?

- (A) Add soap to the water.
- (B) Add more sand to the filter.
- (C) Remove the sand from the filter.
- (D) The students can not get the brown color out of the water.

24. The students try adding more of each of the materials to their filter. A diagram of their new filter is shown to the right. They pour dirty water into the top of their filter. The water fills up the top of the filter and comes out the bottom too slowly. What is MOST LIKELY the problem?

- (A) Too much sand is blocking the water.
- (B) Too many screens are blocking the water.
- (C) Too much paper is soaking up all of the water.
- (D) Too much cotton is soaking up all of the water.



25. Which of the following BEST describes the water cycle?

- (A) Collection → Evaporation → Precipitation → Condensation → (Cycle starts over)
- (B) Condensation → Evaporation → Precipitation → Collection → (Cycle starts over)
- (C) Precipitation → Collection → Evaporation → Condensation → (Cycle starts over)
- (D) Evaporation → Precipitation → Collection → Condensation → (Cycle starts over)

Question 8 adapted from MCAS, 2009, Gr. 5

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