Environment and Traits

Grade 3 Science Worksheet - Challenge Me

Name _____ Date _____

Circle the answer.

1. A gardener moves a pink hydrangea into soil like the soil where blue hydrangeas grow. What will most likely happen?
   - its flowers will turn white
   - its new flowers will turn blue
   - its new flowers will stay pink
   - its leaves will turn pink

2. Pieces cut from one plant were planted low on a mountain and high on the mountain. The low ones grew tall and the high ones stayed short. Why is this good evidence that the environment affects height?
   - the pieces came from different parent plants
   - the pieces were planted in the same spot
   - plants grow taller near mountain tops
   - all the pieces came from one plant, so only the place differed

3. Which trait is most likely affected by both inheritance and the environment?
   - the stripes on a zebra
   - the number of legs on a beetle
   - the color of a kitten's eyes
   - how tall a sunflower grows

4. Two groups of the same kind of bean plant were grown. Group 1 had 6 hours of light; group 2 had 2 hours. Group 1 grew taller. What should the student do to trust this result?
   - stop after one test
   - repeat the test with more plants
   - use different kinds of seeds
   - give group 2 more water next time

5. A student grows two bean plants from the same kind of seed, in the same pots, with the same water. One sits in a sunny window and one sits in a closet. What is being tested?
   - whether sunlight affects how the plants grow
   - whether water affects how the plants grow
   - whether the kind of seed affects growth
   - whether the pots affect how the plants grow

6. A student grows two seedlings in the same light and soil, but waters one twice as often. What is being tested?
   - whether the amount of water affects growth
   - whether the seedlings inherited different traits
   - whether the amount of light affects growth
   - whether the kind of soil affects growth

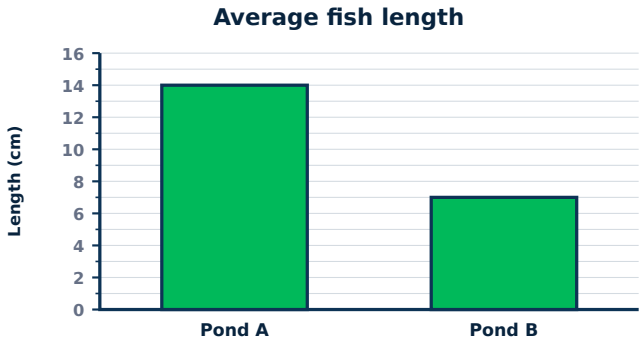
7. A student wants to test whether fertilizer makes tomato plants bigger. Which plan is a fair test?

different kinds of seeds, fertilizer for both
same seeds, light and water; fertilizer for only one
same seeds, but one in sun and one in shade
fertilizer and extra water for the same plant

8. Plant 1 is in a warm room and plant 2 is in a cold room. Plant 1 also gets more water. Why is this not a fair test?

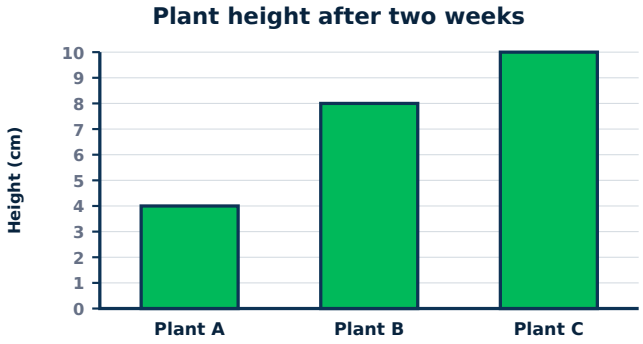
two conditions changed, so the cause is unclear
the plants are the same kind
only one condition changed
the rooms have the same light

9. Pond A has 10 fish and pond B has 100 fish. The ponds are the same size. Use the graph. How much longer are the fish in pond A?



7 cm 2 cm 14 cm 21 cm

10. Plant A was watered 1 time a week, plant B 3 times, and plant C 5 times. Use the graph. What pattern does it show?



more water gave shorter plants
water made no difference
more water gave taller plants in this test
plant B grew the most

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Answer Key - Grade 3 Science Worksheet - Challenge Me

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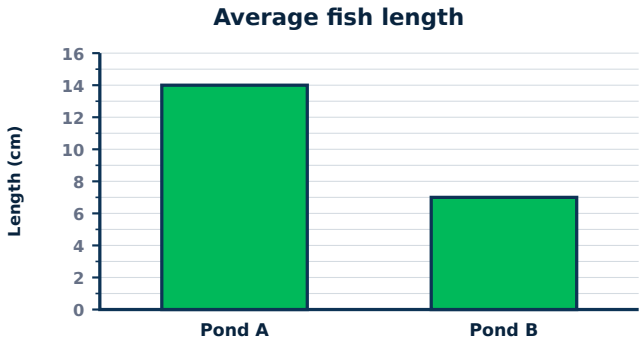
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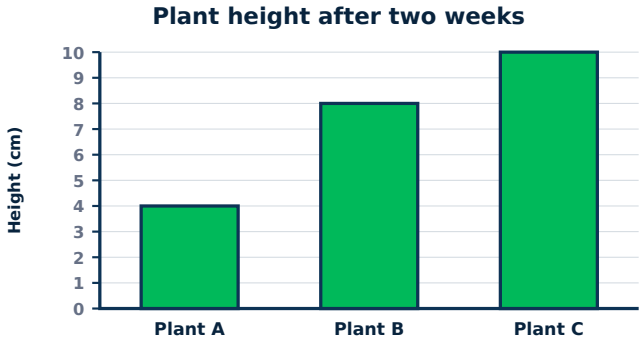
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