Environment and Traits

Grade 3 Science Worksheet - Challenge Me

Name _____ Date _____

Circle the answer.

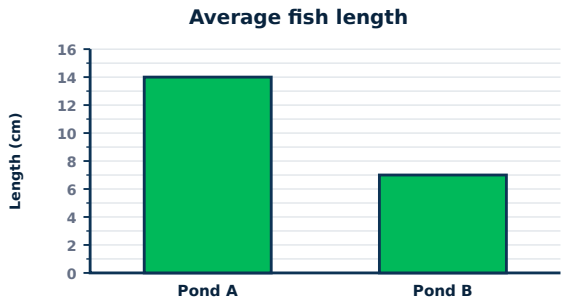
1. A student grows two bean plants from the same kind of seed, in the same pots, with the same water. One sits in a sunny window and one sits in a closet. What is being tested?
   whether water affects how the plants grow
   whether the pots affect how the plants grow
   whether the kind of seed affects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

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

3. A student wants to test whether fertilizer makes tomato plants bigger. Which plan is a fair test?
   same seeds, light and water; fertilizer for only one
   different kinds of seeds, fertilizer for both
   fertilizer and extra water for the same plant
   same seeds, but one in sun and one in shade

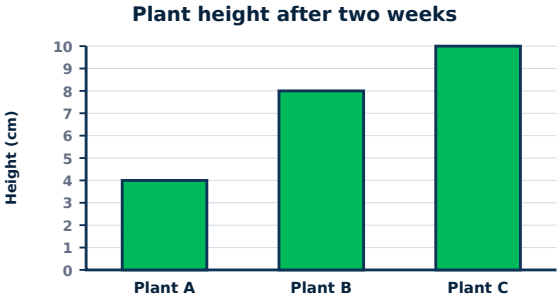
4. Plant 1 is in a warm room and plant 2 is in a cold room. Plant 1 also gets more water. Why is this not a fair test?
   the plants are the same kind
   only one condition changed
   two conditions changed, so the cause is unclear
   the rooms have the same light

5. 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?



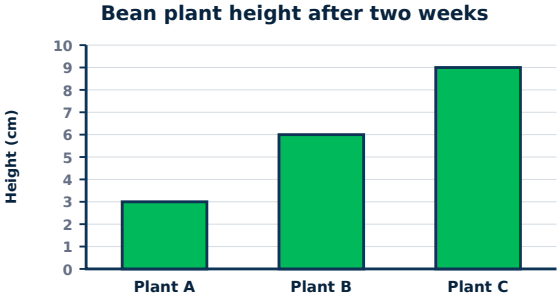
2 cm 7 cm 21 cm 14 cm

6. 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

7. Plant A got 1 hour of sun a day, plant B got 3 hours, and plant C got 6 hours. Use the graph. Plant D gets 4 hours. About how tall will it grow?



about 10 cm about 2 cm about 7 cm about 12 cm

8. Why do scientists grow two plants of the same kind in the same soil and light, changing only the water?
so a growth difference comes from the water
so they can test two things at once
so the plants can use different pots
so the plants inherit different traits

9. 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

10. 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 were planted in the same spot
plants grow taller near mountain tops
the pieces came from different parent plants
all the pieces came from one plant, so only the place differed

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Answer Key - Grade 3 Science Worksheet - Challenge Me

Circle the answer.

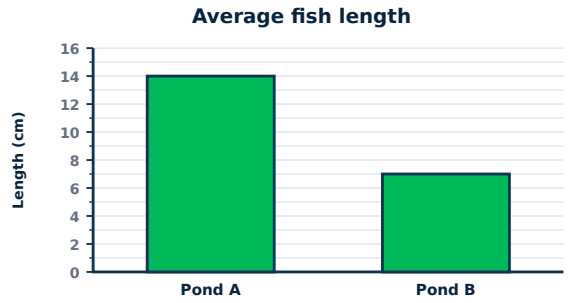
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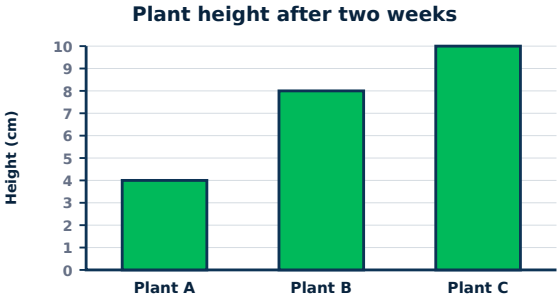
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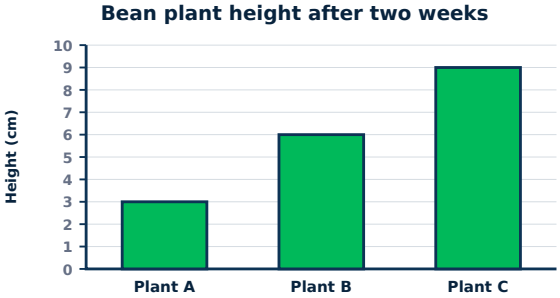
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