Explore Relationships Between Two Variables

Tell which quantity you choose and which quantity changes because of it.

Name _____ **Date** _____

Tonight's spark

A neighbor pays you for helping at her stand. Her table shows 1 hour, $4; 2 hours, $8; 3 hours, $12. You decide how many hours to work. Which number do you choose, and which one changes?

Guess first: if you work 4 hours, will the pay be more than $12, or less?

Hours of sunlight (input)	Plant height (output)
she chooses	she measures

Our class model: the choose-and-respond sort

Try it

Work it out on paper. Write one answer on each line.

1 **The more hours you work, the more money you earn. Which is the independent variable?**

A. money earned **B.** hours worked **C.** the job **D.** the hourly pay

My answer _____

2 **Plants get different amounts of water, and then their heights are measured. Which is the dependent variable?**

A. height of the plant **B.** amount of water **C.** number of plants **D.** color of the pot

My answer _____

3 **In a table of values, which column holds the independent variable?**

A. The last row **B.** The second column (output) **C.** The first column (input)
D. The title row

My answer _____

4 **The cost of apples depends on how many pounds you buy. Which quantity depends on the other?**

A. the store **B.** number of pounds **C.** the apple color **D.** total cost

My answer _____

5 **Which sentence describes a dependent variable?**

A. You pick its value **B.** It changes because of the other variable **C.** It never changes **D.** It is always the larger number

My answer _____

6 **A table shows inputs 1, 2, 3 and outputs 4, 8, 12. What is the output for input 2?**

A. 2 **B.** 4 **C.** 8 **D.** 12

My answer _____

Talk about it

Which one did you pick first, and which one followed from your pick?

Home mission

Use coins. Lay out $4 for 1 hour and $8 for 2 hours of stand work. Ask, "Which number do we choose? Which one depends on it?" Can your student say, "The pay depends on the hours"?

If we get stuck, ask

- Which one did someone get to decide?
- Which one changed because of the other?
- Can you say it with the words "depends on"?

Do it on a screen

Scan or type the link. Same lesson, with hints.

eduwonderlab.com/lessons/9-1/homework.html

How did it feel? (optional)

Tricky Getting there Got it