

Experimental Design

- _____ 1. Linda brought a new pet chipmunk home and noticed that Nippy, the chipmunk, wasn't eating enough of its Chewy Chipmunk Chow. Linda decided to give the chipmunk a different vegetable each day and record the results of how much Nippy ate daily. After 10 days, Linda concluded that Nippy likes beans best.

Which is an example of the dependent variable?

- | | |
|-----------------------|----------------------|
| a. price of beans | c. type of vegetable |
| b. how much Nippy ate | d. Nippy |

- _____ 2. A study was done to test the effects of coffee on sleep. The hypothesis of the experiment was that people who drank coffee when they woke up would stay awake longer. One group was given coffee. One group was not given coffee. The time that subjects stayed awake was timed.

Which of the following is an example of experimental group?

- | | |
|----------------------------|-------------------------|
| a. drank coffee or not | c. subjects with coffee |
| b. subjects without coffee | d. time awake |

- _____ 3. A new chemical is being researched for its ability to improve fruit production in trees. Some trees are given water only and other trees are given water with the chemical added. After a season of growing, the fruit production is recorded for both groups.

Which is an example of the placebo?

- | |
|---------------------------------------|
| a. trees that were given the chemical |
| b. trees that were given water |
| c. the water |
| d. the chemical |

- _____ 4. Johnny brought a new pet hamster home and noticed that Chip, the hamster, wasn't eating enough of its Chewy Hamster Chow. Johnny decided to give the hamster a different vegetable each day and record the results of how much Chip ate daily. After 10 days, Johnny concluded that Chip likes onions best.

Which is an example of the independent variable?

- | | |
|----------------------|----------------------|
| a. price of onions | c. type of vegetable |
| b. how much Chip ate | d. Chip |

- _____ 5. A study was done to test the effects of coffee on sleep. The hypothesis of the experiment was that people who drank coffee when they woke up would stay awake longer. One group was given coffee. One group was not given coffee. The time that subjects stayed awake was timed.

Which of the following is an example of control group?

- | | |
|-------------------------|----------------------------|
| a. time awake | c. drank coffee or not |
| b. subjects with coffee | d. subjects without coffee |

- _____ 6. Veronica brought a new pet gerbil home and noticed that Chip, the gerbil, wasn't eating enough of its Chewy Gerbil Chow. Veronica decided to give the gerbil a different vegetable each day and record the results of how much the Chip ate daily. After 7 days, Veronica concluded that Chip likes corn best.

Which is an example of the experimental group?

- | | |
|----------------------|------------------|
| a. how much Chip ate | c. price of corn |
| b. type of vegetable | d. Chip |

Experimental Design
Answer Section

1. ANS: B
2. ANS: C
3. ANS: C
4. ANS: C
5. ANS: D
6. ANS: D

