

## RQ Variables and Graphs

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. A student ran an experiment on the effects of different colored lights on plant growth by growing bean plants under different colored lights.

Each day, for one month, the student measured and recorded the height of each bean plant.

What type of graph would best show the change in height of the bean plants during the month?

- A. Bar graph                      B. Circle graph  
C. Line graph

2. A student ran an experiment on the effects of different colored lights on plant growth by growing bean plants under different colored lights.

Each day, for one month, the student measured and recorded the height of each bean plant.

In this experiment, what is the independent variable?

- A. Bean Plants  
B. Plant growth  
C. Different colored lights  
D. Sunlight

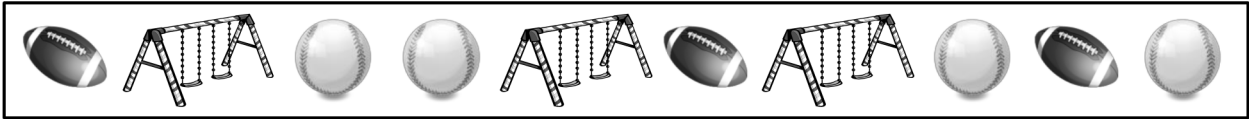
3. A student ran an experiment on the effects of different colored lights on plant growth by growing bean plants under different colored lights.

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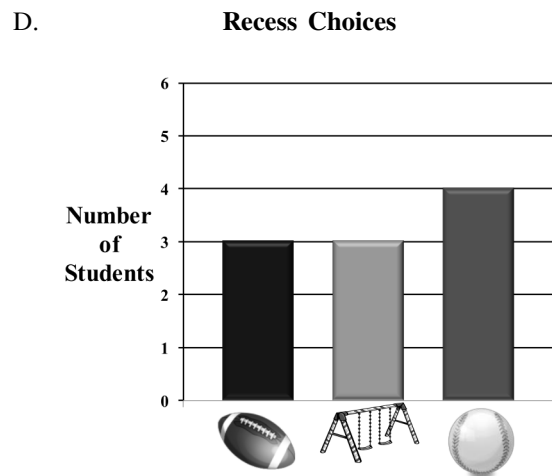
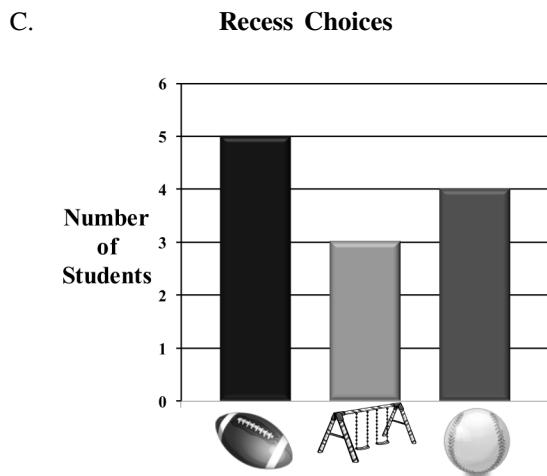
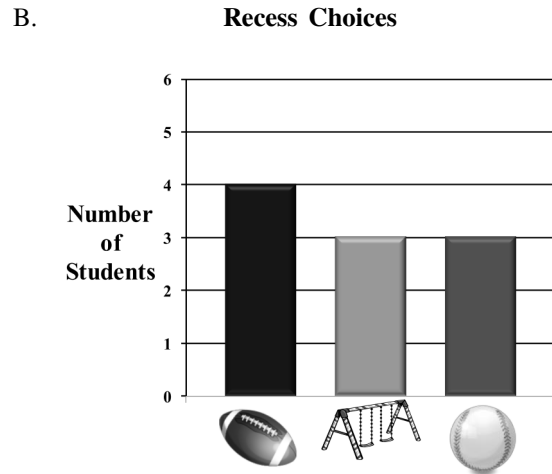
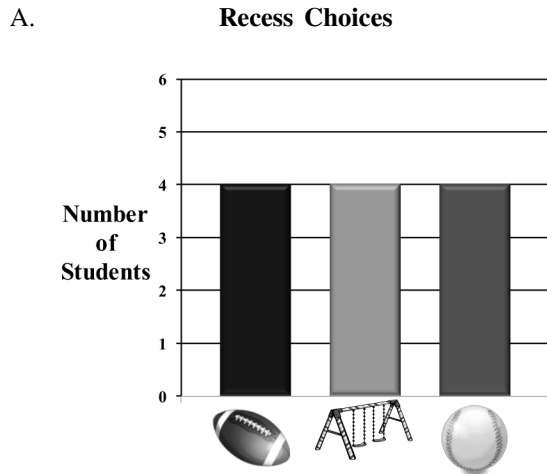
In this experiment, what is the dependent variable?

- A. Bean Plants  
B. Plant growth  
C. Different colored lights  
D. Sunlight

4. Use the picture below to answer the question.



Which bar graph shows the information in the picture?



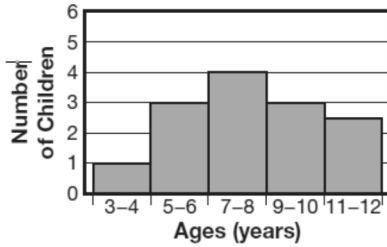
5. The table shows the number of children, ages 3 to 12, who attended a movie.

**Children at a Movie**

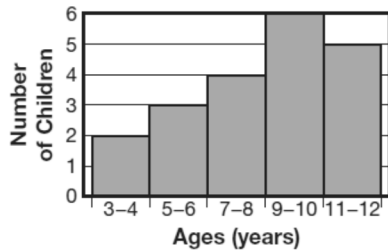
Age (years)	3	4	5	6	7	8	9	10	11	12
Number of Children	1	1	3	0	4	0	3	3	2	3

Which histogram *best* represents the information in the table?

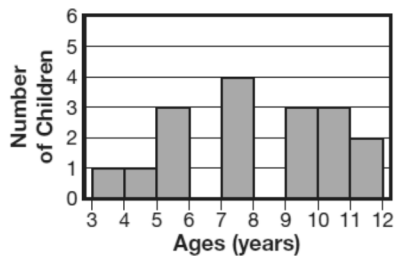
A. **Children at a Movie**



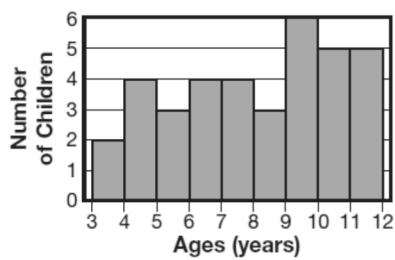
B. **Children at a Movie**



C. **Children at a Movie**



D. **Children at a Movie**

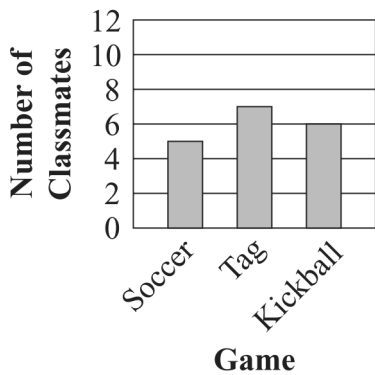


6. Tyrone asked his classmates to vote for their favorite game. Each classmate voted for one game. Their votes are shown below.

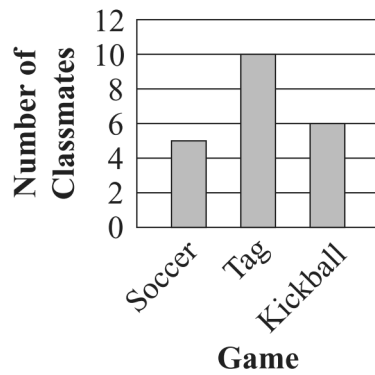
Soccer	Tag	Kickball
Soccer	Tag	Kickball
Soccer	Tag	Kickball
Soccer	Tag	Kickball
Soccer	Tag	Kickball
Tag	Tag	Kickball

Which bar graph correctly shows how many of Tyrone's classmates voted for each game?

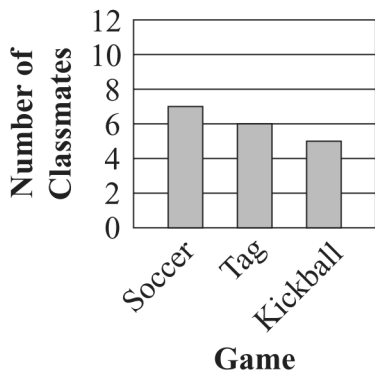
A. **Favorite Games**



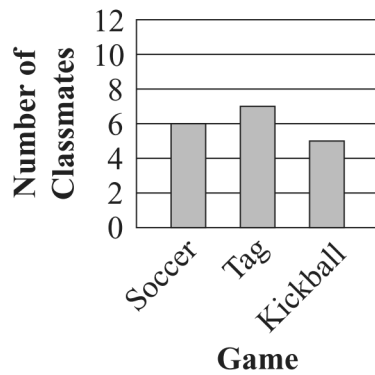
B. **Favorite Games**



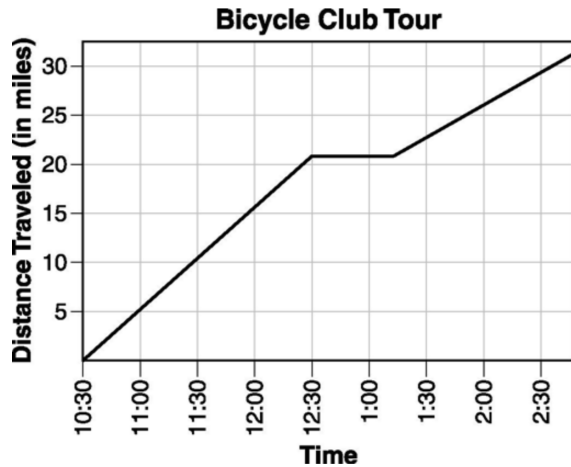
C. **Favorite Games**



D. **Favorite Games**



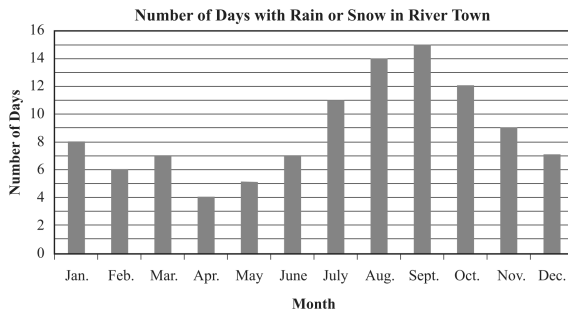
7. Use the graph below to answer the following question.



The graph shows the distance traveled by the bicycle club during their Saturday tour. Based on the information in the graph, what time did they stop for lunch?

- A. 11:30    B. 12:30    C. 1:00    D. 1:15

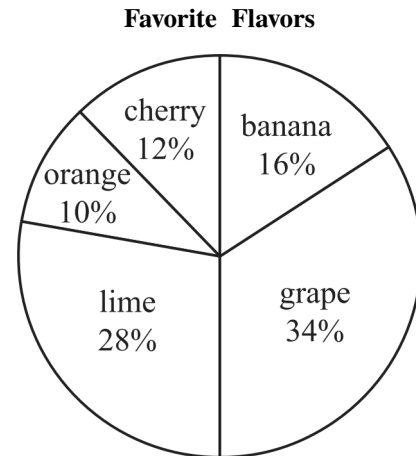
8. Rachel made a bar graph for a weather project.



How many months had *less* than 9 days of rain or snow?

- A. 4    B. 5    C. 7    D. 8

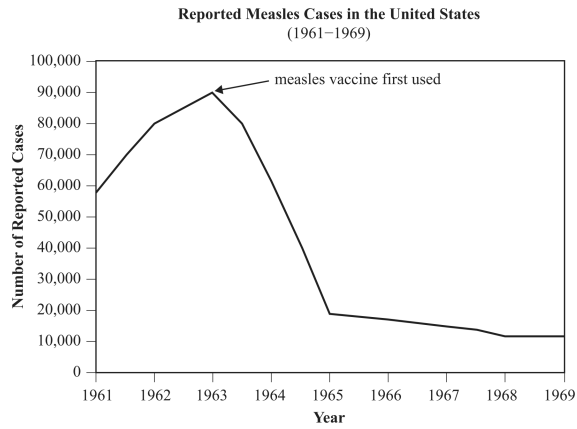
9. The circle graph below shows favorite flavors of jellybeans based on a random survey of 50 people.



How many more people chose grape than cherry as their favorite flavor?

- A. 11 people    B. 22 people  
C. 23 people    D. 46 people

10. The graph below shows the number of measles cases reported for many years.



Which statement is supported by the information in this graph?

- A. The vaccine was responsible for eliminating measles after 1965.
- B. The vaccine was not needed to develop natural immunity to measles.
- C. The vaccine was not given after 1968 because there were few measles cases reported.
- D. The vaccine was responsible for reducing the number of cases of measles in the United States.