

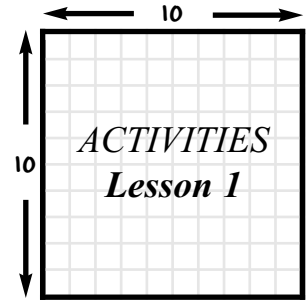
Name: _____

Date: _____ Grade: _____



Predictions

Chance



You are making progress! Answer the following questions. Choose the correct answers or fill in the blanks with words, letters or numbers as each question indicates. Check your answers from the Answer Key. Correct all errors, then complete your next goal.

1. Meteorologists make estimations or guesses based on prior occurrences in _____.
2. The weatherman believes that he can _____ an **outcome** based on what he already knows.
3. One type of weather data is _____.
4. Looking at data and then **predicting** an outcome is known in mathematics as _____.
5. The probability of something happening is sometimes referred to as _____.
6. An 80% chance of rain means that 80 times out of 100 in the past when the weather patterns were the same as today, _____ occurred.
7. _____, _____ and _____ are devices that use probability to effect an outcome.
8. These devices are good for games because the probability of a given outcome is never _____, only possible.
9. Probability has a _____ similar to other parts of mathematics.

Refer to Example Set 1 to answer questions 10-16.

10. The **set** containing all possible outcomes is called the _____.
11. The **sample space** here contains a total of _____ students.
12. The result of an **experiment** is called the _____.
13. A(n) _____ is a set whose members are members of an equal or larger set.
14. A(n) _____ is something that produces results that can be seen and recorded.
15. The outcome of each event is placed within _____.
16. Determine the outcomes if the "experiment" is all the students whose name begins with the letter, T. _____

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Refer to Example Set 2 to answer questions 17-19.

17. There are a total of _____ vehicles in the sample space.
18. The set that shows the *event* of all the red and black vehicles is { _____ }.
19. The set that shows the event of all vehicles that are **NOT** red, blue or white is { _____ }.

Determine the solutions to the probability questions 20-24. A list of data contains the numbers 1, 2, 3, 4, 5, 4, 4 and 6. Determine the following:

20. the sample space _____
(a) {1, 2, 3, 6} (c) {4, 5, 6}
(b) {4} (d) {1, 2, 3, 4, 5, 4, 4, 6}
21. the elements in the event of all the even numbers _____
(a) {2, 4, 6} (c) {2, 4}
(b) {2, 4, 4, 4, 6} (d) {1, 3, 5}
22. the elements in the event of all the numbers greater than 3 _____
(a) {1, 2} (c) {3, 4, 4, 4, 5, 6}
(b) {3, 4, 5, 4, 4, 6} (d) {4, 4, 4, 5, 6}
23. the elements in the event of all the numbers that appear only once _____
(a) {1, 2, 3, 5} (c) {1, 2, 3, 5, 6}
(b) {1, 3, 5, 6} (d) {4, 4, 4}
24. the elements in the event of all the numbers between zero and seven _____
(a) {0, 7} (c) {1, 2, 3, 4, 5}
(b) {6} (d) {1, 2, 3, 4, 4, 4, 5, 6}

Determine the solutions to the probability questions 25-29. The temperatures for one week in Death Valley were recorded as follows: 112°, 112°, 113°, 111°, 111°, 111° and 114°.

25. 110° is contained in the sample space. _____ (a) True or (b) False
26. the elements in the event of the temperature that occur the most _____
27. the elements in the event of the temperatures that occur only once _____
28. the elements in the event of the temperatures that occur at least once _____
29. the elements in the event of the temperatures that occur more than once _____
30. Write the **Life Principle**. “ _____
_____.”