Name $\qquad$ Date $\qquad$ Period $\qquad$

Using the probability scale, interpret the probability given for each situation.

| 0 |  | $1 / 2$ |  | 1 |
| :---: | :---: | :---: | :---: | :---: |
| Impossible | Unlikely | Equally Likely | Likely | Certain |

1. During the news forecast, the meteorologist said there is an $80 \%$ chance of rain on Friday.
2. The probability for landing on tails, when flipping a coin, is 0.5 .
3. $2 / 6$, or $1 / 3$, is the probability of rolling a prime number when rolling a standard 6 -sided die.
4. The probability of a person living to be 200 years old is 0 .
5. In Spokane, Washington, it has rained Monday, Tuesday, Wednesday, and Thursday this week. What is the probability that it will rain on Friday in Spokane, Washington?
6. Josie has a bowl of original Skittles (orange, red, yellow, purple, and green). Josie's favorite flavor is cherry (red Skittle). What is the probability of pulling a red Skittle from the bowl?

Interpret the probability of each experimental outcome.
7. The probability of rolling a 2 when rolling a standard 6 -sided die is $1 / 6$. During an experiment, Sam rolled a die 24 times. The die landed on 2 seventeen times. Was Sam's experimental data likely for this situation?
8. Jenée was flipping a coin. After flipping the coin 20 times, she observed that the coin landed on heads 2 times. Was Jenée's experimental data likely for this situation?

## ANSWER KEY

Using the probability scale, interpret the probability given for each situation.

| 0 |  | $1 / 2$ |  |
| :---: | :---: | :---: | :---: |
| Impossible | Unlikely | Equally Likely | Likely |

1. During the news forecast, the meteorologist said there is an $80 \%$ chance of rain on Friday.

It is LIKELY that it will rain on Friday.
2. The probability for landing on tails, when flipping a coin, is 0.5 .

It is EQUALLY LIKELY that the coin will land on tails.
3. $2 / 6$, or $1 / 3$, is the probability of rolling a prime number when rolling a standard 6 -sided die. It is UNLIKELY of rolling a prime number when rolling a 6-sided die.
4. The probability of a person living to be 200 years old is 0 .

It is IMPOSSIBLE that a person will live to be 200 years old.
5. In Spokane, Washington, it has rained Monday, Tuesday, Wednesday, and Thursday this week. What is the probability that it will rain on Friday in Spokane, Washington?

It is LIKELY that it will rain on Friday in Spokane, Washington.
6. Josie has a bowl of original Skittles (orange, red, yellow, purple, and green). Josie's favorite flavor is cherry (red Skittle). What is the probability of pulling a red Skittle from the bowl?

It is UNLIKELY that Josie will pull a cherry (red) Skittle from the bowl.

Interpret the probability of each experimental outcome.
7. The probability of rolling a 2 when rolling a standard 6 -sided die is $1 / 6$. During an experiment, Sam rolled a die 24 times. The die landed on 2 seventeen times. Was Sam's experimental data likely for this situation?

This outcome is UNLIKELY. One would expect Sam to roll a two $1 / 6$ of the time, or 4 out of 24 .
8. Jenée was flipping a coin. After flipping the coin 20 times, she observed that the coin landed on heads 2 times. Was Jenée's experimental data likely for this situation?

This outcome is UNLIKELY. One would expect Jenee's coin to land on heads half of the flips, or 10 out of 20.

