LESSON MAKER PRO

Chance Checkpoint

Name how likely each outcome is.

GRADE 4 · 4.PS.2.a

4.PS.2.a "Describe probability as the degree of likelihood of an outcome occurring using terms such as impossible, unlikely, equally likely, likely, and certain."

NAME _____ DATE _____

CHANCE WORDS

An outcome is what happens in a chance event. Use impossible when it cannot happen and certain when it must happen. If an outcome is less than half likely, say unlikely, exactly half likely, say equally likely, and more than half likely, say likely.

WORKED EXAMPLE

A box has 13 red pencils and 14 blue pencils. Describe the chance of picking a blue pencil without looking.

1. Count all pencils: 13 + 14 = 27.
2. Blue pencils make up 14 of the 27 pencils.
3. Since 14 is more than half of 27, picking blue is likely.

Answer: likely

PRACTICE 6 problems

1 A standard number cube has faces numbered 1 through 6. Describe the chance of rolling a 9.

ANSWER _____

2 A spinner has 4 equal sections. Three sections are purple, and 1 section is white. Describe the chance of landing on purple.

ANSWER _____

3 A pouch has 5 striped beads and 5 plain beads. Describe the chance of picking a striped bead.

ANSWER _____

4 A set has 6 tickets, and every ticket says "gold." Describe the chance of picking a gold ticket.

ANSWER _____

5 A jar has 7 blue marbles and 3 red marbles. Describe the chance of picking a red marble.

ANSWER _____

6 A basket has 3 apples and 6 pears. Describe the chance of picking a pear.

ANSWER _____

APPLY IT Show your work

1 The school library prize box has 9 fantasy bookmarks and 3 sports bookmarks. Nia picks 1 bookmark without looking. Describe the chance that she picks a fantasy bookmark.

WORK SPACE

ANSWER _____

2 At game club, a reward wheel has 12 equal spaces. Six spaces show coins, and 6 spaces show gems. Eli spins the wheel once. Describe the chance that it lands on a gem.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A prize bag holds 10 stickers: 5 rocket stickers, 3 planet stickers, and 2 star stickers. It has no robot stickers. Put these outcomes in order from least to greatest chance: drawing a robot, drawing a star, drawing a planet, drawing a rocket. Then label each outcome with impossible, unlikely, equally likely, likely, or certain.

WORK SPACE AND ANSWER

ANSWER KEY

Chance Checkpoint

GRADE 4 · 4.PS.2.a

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A standard number cube has faces numbered 1 through 6. Describe the chance of rolling a 9.	**impossible**
2	A spinner has 4 equal sections. Three sections are purple, and 1 section is white. Describe the chance of landing on purple.	**likely**
3	A pouch has 5 striped beads and 5 plain beads. Describe the chance of picking a striped bead.	**equally likely**
4	A set has 6 tickets, and every ticket says "gold." Describe the chance of picking a gold ticket.	**certain**
5	A jar has 7 blue marbles and 3 red marbles. Describe the chance of picking a red marble.	**unlikely**
6	A basket has 3 apples and 6 pears. Describe the chance of picking a pear.	**likely**

PART 2 · APPLY IT

1. **likely** There are 12 bookmarks in all. Since 9 of the 12 bookmarks are fantasy, picking a fantasy bookmark is more than half likely.
2. **equally likely** Half of the spaces, 6 out of 12, show gems. Landing on a gem is exactly half likely.

CHALLENGE

robot, star, planet, rocket. Drawing a robot is impossible, drawing a star is unlikely, drawing a planet is unlikely, and drawing a rocket is equally likely.

Accept the listed probability terms and equivalent phrases such as "no chance" for impossible and "even chance" for equally likely. Likely means more than one half, and unlikely means less than one half.