Name: _____ Date: _____

Describe chance

Choose one object without looking. Is it certain, likely, unlikely or impossible?



1. A bag has 4 red counters and no blue counters. Is picking red certain or impossible?

   💡 Hint: Are ALL of them like that (certain), or NONE of them (impossible)?

   ◯ Certain

   ◯ Impossible

   Certain

2. The same bag has 4 red counters and no blue counters. Is picking blue certain or impossible?

   💡 Hint: Are ALL of them like that (certain), or NONE of them (impossible)?

   ◯ Certain

   ◯ Impossible

   Impossible

3. A box has only 5 pencils. Is picking a pencil certain or impossible?

   💡 Hint: Are ALL of them like that (certain), or NONE of them (impossible)?

   ◯ Certain

   ◯ Impossible

   Certain

4. A box has only 5 pencils. Is picking a ruler certain or impossible?

   💡 Hint: Are ALL of them like that (certain), or NONE of them (impossible)?

   ◯ Certain

   ◯ Impossible

   Impossible

5. Roll a fair number cube. Is rolling a number less than 7 certain or impossible?

   💡 Hint: Are ALL of them like that (certain), or NONE of them (impossible)?

   ◯ Certain

   ◯ Impossible

   Certain

6. Roll a fair number cube. Is rolling 8 certain or impossible?

   💡 Hint: Are ALL of them like that (certain), or NONE of them (impossible)?

   ◯ Certain

   ◯ Impossible

   Impossible

7 A bag has 5 green counters and 1 yellow counter. Is green more likely or less likely than yellow?

💡 Hint: Count each colour. More counters means more likely.

- ◯ More likely
- ◯ Less likely

More likely

8 A bag has 2 red counters and 6 blue counters. Is red more likely or less likely than blue?

💡 Hint: Count each colour. More counters means more likely.

- ◯ More likely
- ◯ Less likely

Less likely

9 A bag has 3 red counters and 3 blue counters. Are red and blue equally likely?

💡 Hint: Is there the same number of each? Then they are equally likely.

Yes

10 A bag has 4 green counters and 2 yellow counters. Which colour is more likely?

💡 Hint: Count each colour or shape. The biggest number is the most likely.

- ◯ Yellow
- ◯ Green

Green

11 A bag has 1 purple counter and 5 orange counters. Which colour is less likely?

💡 Hint: Count each colour or shape. The biggest number is the most likely.

- ◯ Purple
- ◯ Orange

Purple

12 A bag has 2 red counters and 2 blue counters. Is red equally likely as blue?

💡 Hint: Is there the same number of each? Then they are equally likely.

Yes

13 Toss a fair coin. Are heads and tails equally likely?

💡 Hint: Is there the same number of each? Then they are equally likely.

Yes

14 Roll a fair number cube. Are 2 and 5 equally likely?

💡 Hint: Is there the same number of each? Then they are equally likely.

Yes

15 A bag contains 6 yellow counters. Is picking yellow certain or impossible?

💡 Hint: Are ALL of them like that (certain), or NONE of them (impossible)?

- ◯ Certain
- ◯ Impossible

Certain

16 A bag contains 6 yellow counters. Is picking green certain or impossible?

💡 Hint: Are ALL of them like that (certain), or NONE of them (impossible)?

- ◯ Impossible
- ◯ Certain

Impossible

17 Roll a fair number cube. Is rolling 0 certain or impossible?

💡 Hint: Are ALL of them like that (certain), or NONE of them (impossible)?

- ◯ Certain
- ◯ Impossible

Impossible

18 Roll a fair number cube. Is rolling a number from 1 to 6 certain or impossible?

💡 Hint: Are ALL of them like that (certain), or NONE of them (impossible)?

- ◯ Impossible
- ◯ Certain

Certain

19 A bag has 7 blue counters and 1 red counter. Is blue likely or unlikely?

💡 Hint: Count each colour. More counters means more likely.

- ◯ Unlikely
- ◯ Likely

Likely

20 A bag has 7 blue counters and 1 red counter. Is red likely or unlikely?

💡 Hint: Count each colour. More counters means more likely.

- ◯ Unlikely
- ◯ Likely

Unlikely

21 A bag has 2 white counters and 5 black counters. Which colour is more likely?

💡 Hint: Count each colour or shape. The biggest number is the most likely.

- ◯ Black
- ◯ White

Black

22 A bag has 4 white counters and 4 black counters. Which is more likely, or are they equally likely?

💡 Hint: Is there the same number of each? Then they are equally likely.

- ◯ Black
- ◯ Equally likely
- ◯ White

Equally likely

23 A bag has 1 star card and 4 circle cards. Which shape is less likely?

💡 Hint: Count each colour or shape. The biggest number is the most likely.

- ◯ Star
- ◯ Circle

Star

24 A bag has 3 star cards and 1 circle card. Which shape is more likely?

💡 Hint: Count each colour or shape. The biggest number is the most likely.

- ◯ Star
- ◯ Circle

Star

25 A bag has 5 square cards and no triangle cards. Is a triangle possible or impossible?

💡 Hint: Is there at least one? Then it is possible. None at all? Impossible.

- ◯ Impossible
- ◯ Possible

Impossible

26 A bag has 5 square cards and 1 triangle card. Is a triangle possible or impossible?

💡 Hint: Is there at least one? Then it is possible. None at all? Impossible.

- ◯ Possible
- ◯ Impossible

Possible

27 A bag has 3 red, 3 blue, and 3 green counters. Are the three colours equally likely?

💡 Hint: Is there the same number of each? Then they are equally likely.

Yes

28 A bag has 2 red, 5 blue, and 1 green counter. Which colour is most likely?

💡 Hint: Count each colour or shape. The biggest number is the most likely.

- ◯ Blue
- ◯ Green
- ◯ Red

Blue

29 A bag has 2 red, 5 blue, and 1 green counter. Which colour is least likely?

💡 Hint: Count each colour or shape. The biggest number is the most likely.

- ◯ Green
- ◯ Red
- ◯ Blue

Green

30 Toss a fair coin. Is landing on its edge one of the two outcomes in our coin model?

💡 Hint: Is there at least one? Then it is possible. None at all? Impossible.

No

31 A bag has 8 orange counters and 2 purple counters. Is orange likely or unlikely?

💡 Hint: Count each colour. More counters means more likely.

- ◯ Unlikely
- ◯ Likely

Likely

32 A bag has 8 orange counters and 2 purple counters. Is purple likely or unlikely?

💡 Hint: Count each colour. More counters means more likely.

- ◯ Unlikely
- ◯ Likely

Unlikely

33 Roll a fair number cube. Is rolling an even number equally likely as rolling an odd number?

💡 Hint: Is there the same number of each? Then they are equally likely.

Yes

34 A bag has 6 red counters and 3 blue counters. Can you pick a blue counter?

💡 Hint: Is there at least one? Then it is possible. None at all? Impossible.

Yes