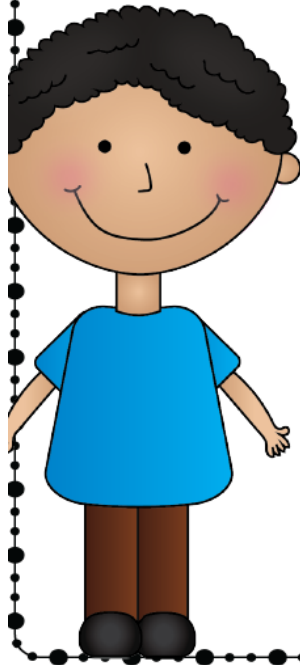


Probability

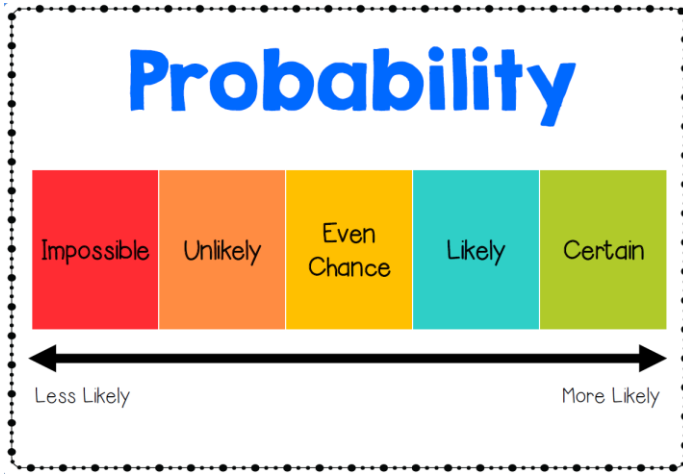


Impossible
Unlikely
Even Chance
Likely
Certain



Probability is the chance that something will happen, or how likely it is that an event will occur.

We can use different terms to describe how likely something is to happen:



Likely

Something that will probably happen or is expected.

It is likely that you will see a tiger at the zoo.

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Certain

Having no doubt that something will happen or is true.

The sun will rise in the morning.

Impossible

Something that is not able to happen.

It is impossible for it to rain gumballs from the sky.

Unlikely

Something that probably won't happen.

It is unlikely that you will win a million dollars.

Even Chance

Events that are equally likely to occur.

If you flip a coin it has an even chance of being heads or tails.

You might like to try watching this video to learn more about chance or probability:

Chance And Probability

Here are some activities you can try out on a sheet or in a spare copy:

A likely unlikely possible impossible certain

1. Write one of the words above after each of the sentences.

(a) Tomorrow will be Tuesday.

(b) Ireland will win the next Rugby World Cup.

(c) It will snow today.

(d) I will be sick tomorrow.

(e) I will eat today.

(f) I will become the next President of Ireland.

(g) The school will close tomorrow for a week.



2. Write one of the words above for each of the following.

(a) I will pull out a blue.



(b) I will pull out a yellow.



(c) I will pull out a green.



B 1. Write '**impossible**', '**unlikely**', '**likely**', '**possible**' or '**certain**' for each.

impossible unlikely likely possible certain

- (a) What are the chances of rolling a 6 on the first throw of a dice?
- (b) What are the chances of rolling a number between 1 and 6?
- (c) What are the chances of rolling a 2 if you have 10 goes?
- (d) What are the chances of rolling a 9?
- (e) What are the chances of rolling three 6s in a row?
- (f) What are the chances of rolling an even number?
- (g) What are the chances of rolling a single-digit number?
- (h) What are the chances of rolling a two-digit number?



2. Roll the dice 20 times. Make a list to see which numbers are rolled the most.



Try it At Home!

Get a red, green and blue block or counter. Put the three of them in a bag. Pick out one without looking. Write down what colour it was. Do this again 30 times. At the end write down how many times you picked out a red, green and blue.

Do the activity again but this time put 2 red blocks and 1 blue block in the bag. First predict what you think will happen. Will you pick out more blue or red blocks? Why?

Pick from the bag 30 times again. At the end write down how many times you picked out a red and a blue. What happened? Why?

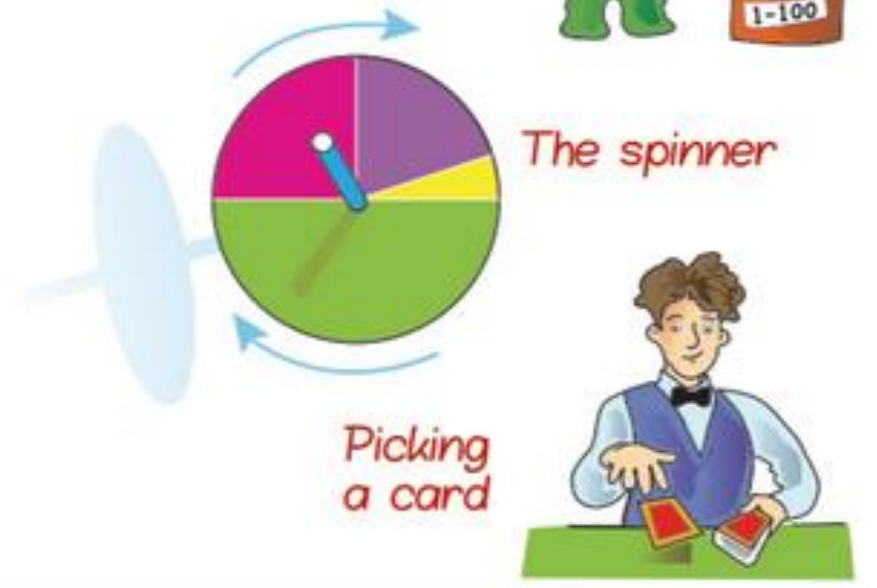
Repeat the activity 2 more times. First put 3 red blocks and 1 blue block in the bag. Then try it with 3 red blocks and 2 blue blocks in the bag. Each time predict what you think will happen and check your prediction with the results at the end.

Did your prediction match the outcome? Why

D**Most likely, less likely, least likely.**

Match the sentence with the words.

- | | |
|---|--------------|
| 1. The blue snail will win | Most likely |
| The pink snail will win | Less likely |
| The green snail will win | Least likely |
| 2. Ticket number is 60 | Most likely |
| Ticket number is >60 | Less likely |
| Ticket number is <60 | Least likely |
| 3. Spinner will land on purple | Most likely |
| Spinner will land on green | Less likely |
| Spinner will land on yellow | Least likely |
| 4. Choose a card from a deck without looking. | Most likely |
| Card will be a 10 | Less likely |
| Card will be higher than 10 | Least likely |
| Card will be lower than 10 | Least likely |





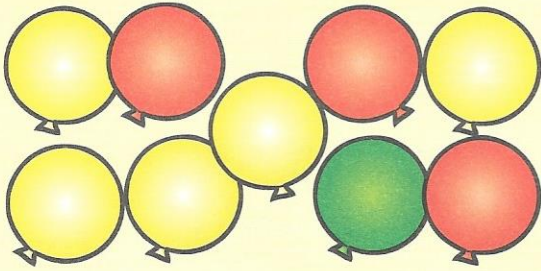
The pointer spins around. On which colour is it

1. most likely to stop, and
2. least likely to stop, for each of the following?

(a)		(b)		(c)	
Most likely	Least likely	Most likely	Least likely	Most likely	Least likely
<input type="checkbox"/> Yellow	<input type="checkbox"/> Yellow	<input type="checkbox"/> Yellow	<input type="checkbox"/> Yellow	<input type="checkbox"/> Yellow	<input type="checkbox"/> Yellow
<input type="checkbox"/> Purple	<input type="checkbox"/> Purple	<input type="checkbox"/> Green	<input type="checkbox"/> Green	<input type="checkbox"/> Green	<input type="checkbox"/> Green
<input type="checkbox"/> Red	<input type="checkbox"/> Red	<input type="checkbox"/> Red	<input type="checkbox"/> Red	<input type="checkbox"/> Red	<input type="checkbox"/> Red
<input type="checkbox"/> Blue	<input type="checkbox"/> Blue	<input type="checkbox"/> Purple	<input type="checkbox"/> Purple	<input type="checkbox"/> Purple	<input type="checkbox"/> Purple

What are the chances?

1.



Party game

Burst all the balloons at random by jumping on them. Which colour will burst first?

most likely

least likely

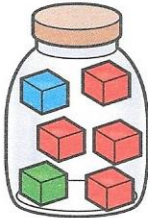
2. Look at the cubes in each jar.

What is the chance of picking out a  ,  or  ?

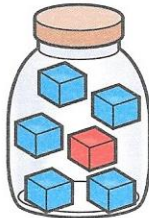
possible impossible likely unlikely certain



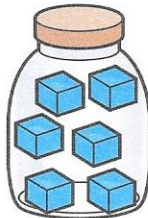
(a)



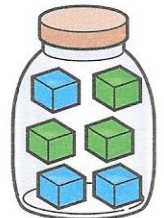
(b)



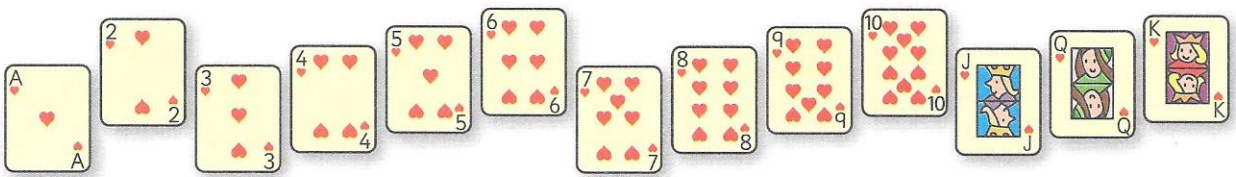
(c)




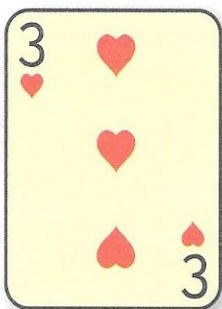
(d)



3. Jamie is going to place all the heart cards from a deck face-down on the table.



He turns the cards over 1 at a time. The first card he turns is  .
What is the chance that the next card will be...



- (a) higher than a 3? _____
- (b) a heart? _____
- (c) a picture card? _____
- (d) a club? _____
- (e) the 3 of hearts? _____
- (f) lower than a 3? _____





Use the word box from Question 2 to answer these.

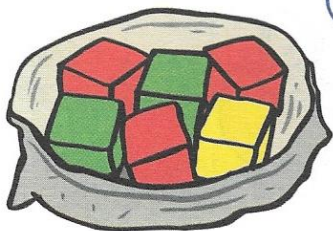


Chance

1 Choose a word from the list to go with each statement.

possible impossible definitely likely unlikely

- (a) You are a boy or a girl. _____ 
- (b) You have a laptop in your pocket. _____
- (c) You will stay in school until midnight tonight. _____
- (d) You will have a pizza for dinner tonight. _____ 
- (e) You will be in fifth class next year. _____
- (f) You will earn €5 million before you go to bed tonight. _____
- (g) You will watch TV for 10 hours today. _____ 
- (h) You will leave Ireland for a holiday next summer. _____
- (i) You are working on a page in *Maths Mate 4*. _____
- (j) You will have dinner today. _____
- (k) You are less than 15 years old. _____
- (l) You will meet a very famous person in your home today. _____
- (m) You will be a day younger tomorrow. _____
- (n) You are in fourth class. _____
- (o) You are older than your teacher. _____
- (p) You will find €5 on your way home. _____ 
- (q) You will grow 55cm in the next 5 minutes. _____
- (r) Today is the day before tomorrow. _____



2 Look at the 6 cubes in this bag. If you cannot see through the bag, what are the chances of choosing:

- (a) a red cube?  out of 
- (b) a yellow cube?  out of 
- (c) a green cube?  out of 

3 There are 10 cubes in this bag. Read the information below and work out how many yellow, blue and red cubes are in the bag.

- There is an even chance of drawing out a red cube.
- There is a 1 in 5 chance of drawing out a blue cube.
- There is a 3 in 10 chance of drawing out a yellow cube.

red  blue  yellow 

