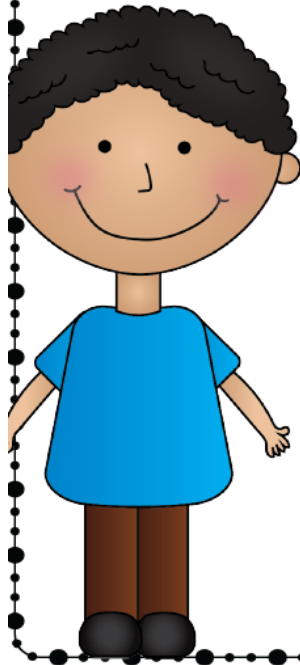


# Probability

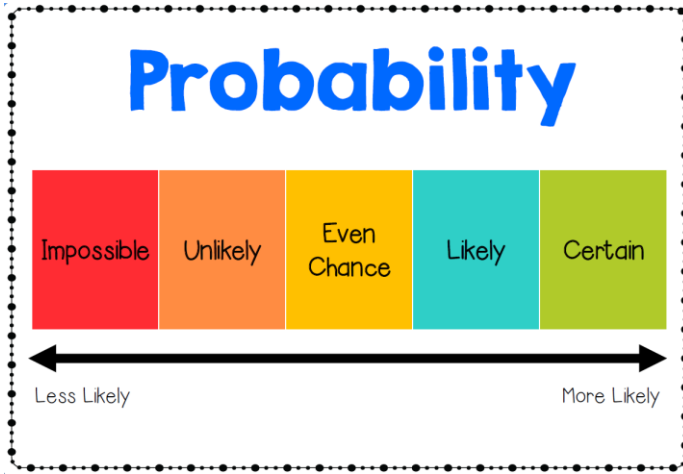


Impossible  
Unlikely  
Even Chance  
Likely  
Certain



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.

A cartoon girl with brown hair in pigtails, wearing a green shirt and blue pants.

**Certain**

Having no doubt that something will happen or is true.

The sun will rise in the morning.

A cartoon boy with black hair, wearing a green shirt and blue pants.

**Impossible**

Something that is not able to happen.

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

A cartoon boy with black hair, wearing a blue shirt and brown pants.

**Unlikely**

Something that probably won't happen.

It is unlikely that you will win a million dollars.

A cartoon girl with black hair, wearing an orange shirt and blue pants.

**Even Chance**

Events that are equally likely to occur.

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

A cartoon boy with black hair, wearing a yellow shirt and blue pants.

Look at the following sentences. What are the chances of each one happening?

- (a) Wednesday will come straight after Tuesday.
- (b) It will rain tomorrow.
- (c) It will get dark tonight.
- (d) We will have no homework tonight.
- (e) An elephant will fly an aeroplane.
- (f) I will have pizza for dinner tonight.
- (g) I will walk on the moon.
- (h) The sun will fall out of the sky.
- (i) Hallowe'en will be the 31st of October.



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

## Chance And Probability

Now try these activities on a sheet/in your spare copy:

**A** Look at the pictures. Read the sentences. Are they **likely** or **unlikely** to happen?



1. The children will build a snowman.



2. It will rain today.



3. Zoe and Shane are on time for school.



4. Sarah will go to school on an elephant.



5. Dara will read his library book tonight.



6. Emma will stay off school.



7. Jamie will play for Ireland.



8. The girl in green will win the race.

**B** Chance.

1.  What are the chances of pulling out a red?  
Is it likely or unlikely to happen?

2.  What are the chances of pulling out a purple?  
Is it likely or unlikely to happen?

- C** 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.

**D** Read the sentences. How likely is it that each of them will happen? Number them in order from 1 to 3. 3 means least likely to happen and 1 means most likely to happen.

1. I will meet the President of America today.  3  
 I will eat my dinner this evening.   
 I will see a squirrel on my way home.



2. It will snow at the weekend.   
 It will rain at the weekend.   
 The weather will be really hot at the weekend.

3. I will get a horse for my birthday.   
 I will get a bike for my birthday.   
 I will get an elephant for my birthday.



4. School will be closed tomorrow.   
 We will have school tomorrow.   
 We will have homework tomorrow.

5. I will win the lottery.   
 I will fly to the moon.   
 I will get a night off from homework.



**E** 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.



# Chance Problem Solving

Colour in the marbles to make the sentences true.



1. You might choose a red marble.



2. You won't choose a blue marble.



3. You might choose a yellow marble.



4. You have an even chance of choosing a green marble and a red.



5. You will choose a blue marble.



6. You won't choose a green marble.

