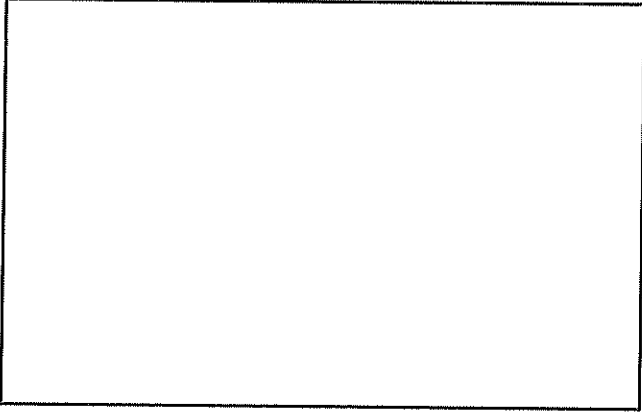
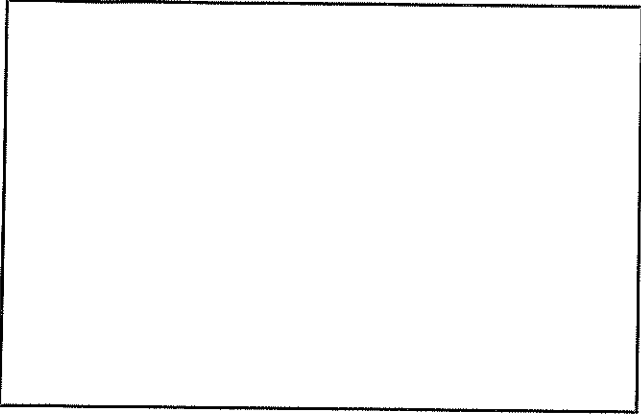
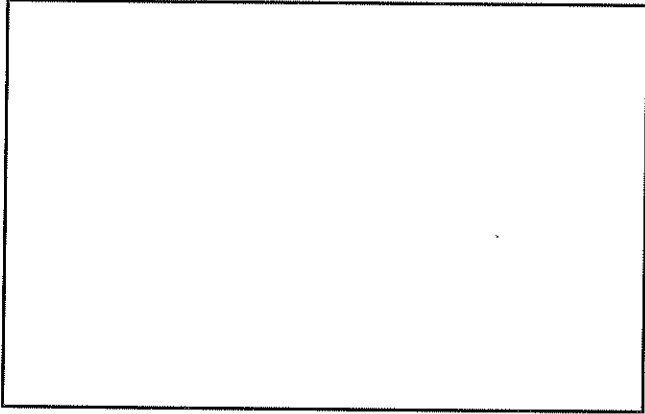
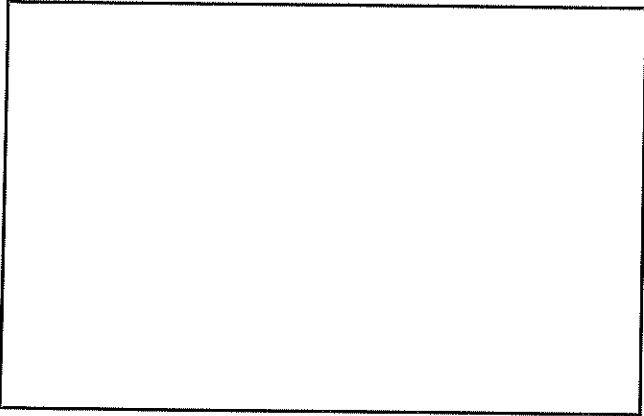
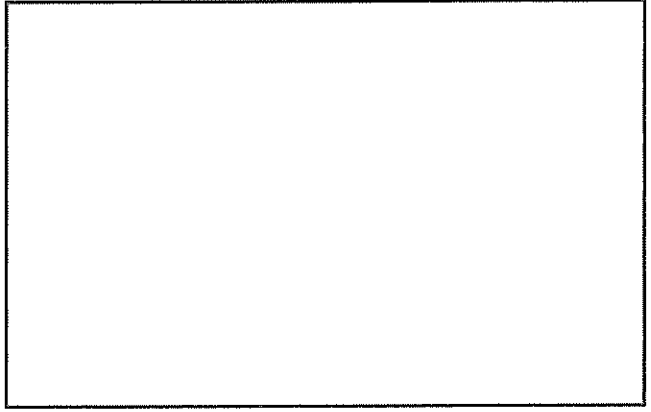
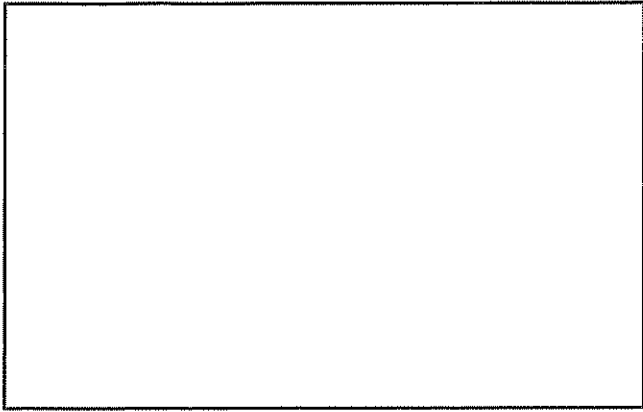


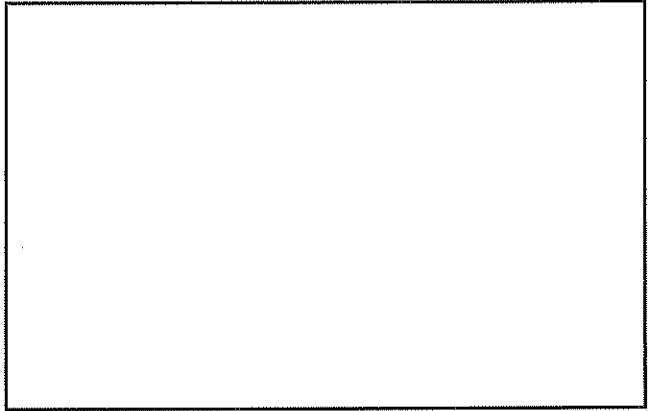
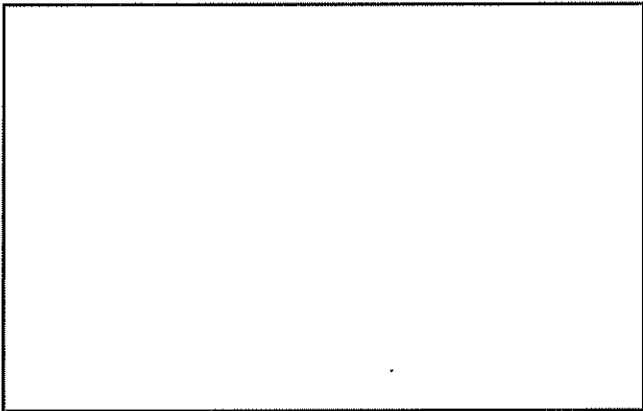
How the Kangaroos Got Their Tails



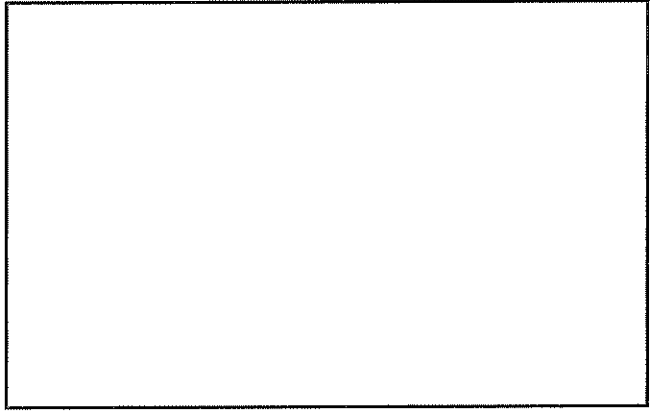
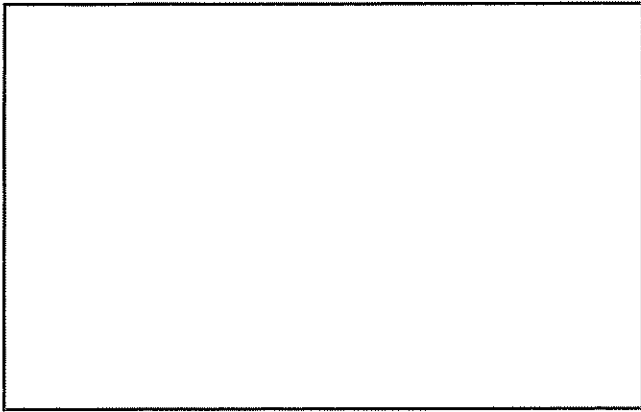


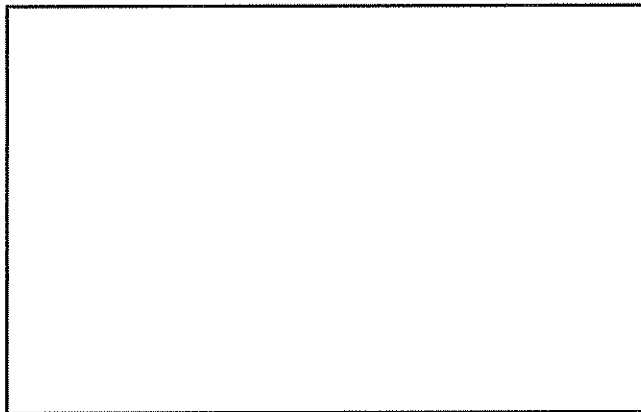
How the Kangaroos Got Their Tails Storyboard



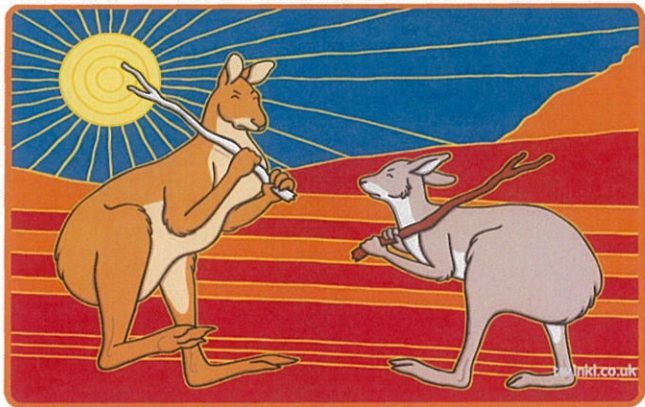
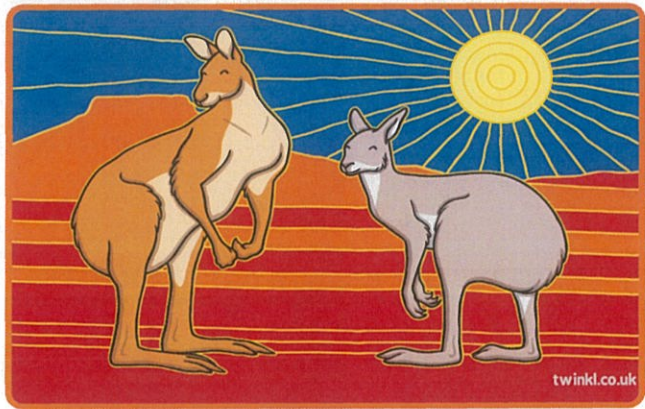
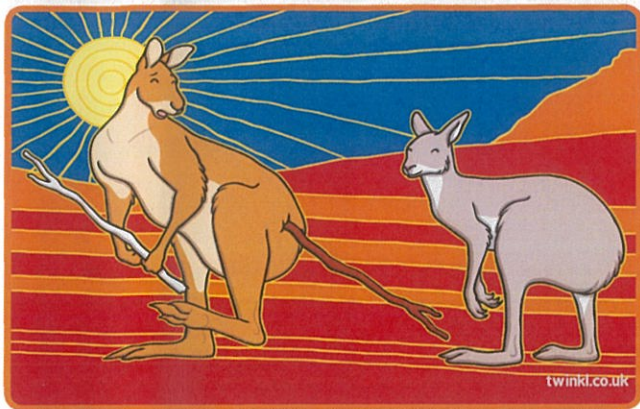
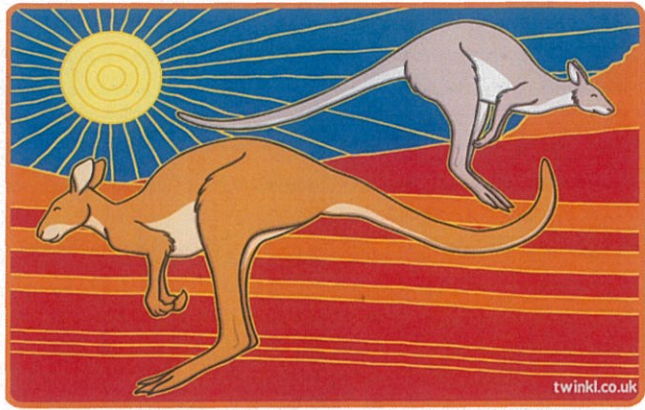
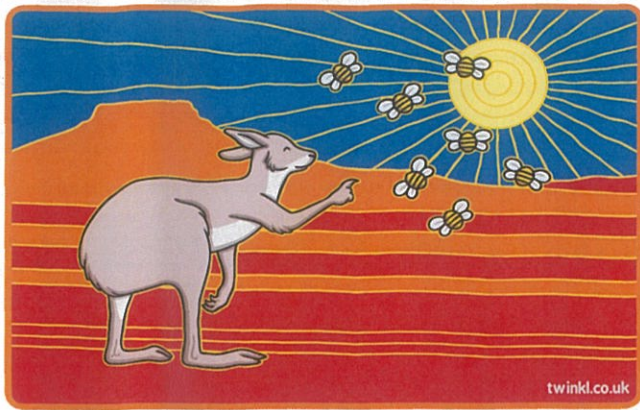


How the Kangaroos Got Their Tails Storyboard

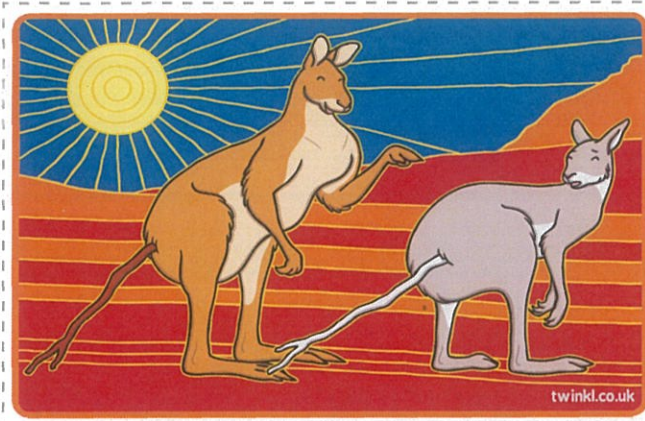




How the Kangaroos Got Their Tails Storyboard Images



How the Kangaroos Got Their Tails Storyboard Images



likely

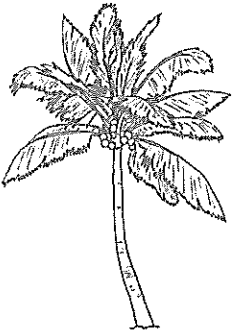
unlikely

certain

impossible

Open-Ended Chance Scenarios

Explain if the following events are likely, unlikely, certain or impossible and explain your reasoning.



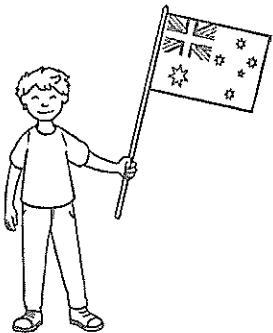
1. What is the chance your next family holiday will be a trip to a tropical island?



2. What is the chance you will go for a bike ride this weekend?



3. What is the chance the principal will give the whole school an extra week of holidays?



4. What is the chance you will be asked to be the next Prime Minister of Australia?

Challenge

Create your own chance scenario that could be likely, unlikely, certain or impossible. Ask a friend to answer it.

Jelly Bean Chance

Here is a packet of different coloured jelly beans.



1. Is it likely you could pull out a blue jelly bean?

2. What is the chance of pulling out an orange jelly bean?

3. Is there an even chance of pulling out a yellow and green jelly bean?

4. What is the chance of pulling out a black jelly bean?

5. If you pulled out a jelly bean, are you certain it would be pink, blue, orange, green or yellow? _____

6. Is there an even chance of pulling out an orange and a pink jelly bean?

Describe the Monster

Choose the words and phrases that describe the monster.

- hairy
- scaly
- fluffy
- orange
- blue
- green
- big
- enormous
- small
- tiny
- scary
- kind
- lonely
- crusty toes
- stripy nose
- pointy tusks
- long horns
- spotty tail
- purple claws
- long neck
- yellow tummy



Write some sentences to describe the monster.

Describe the Monster



Choose the words and phrases that describe the monster.
Can you add any of your own?

- hairy
- scaly
- orange
- blue
- enormous
- tiny
- friendly
- fearsome
- pointy tusks
- purple claws

Write some sentences to describe the monster.

Describe the Monster



Write some words and phrases that describe the monster.

.....

Write some sentences to describe the monster.

Chance and Data Dice Roll

Answer the chance questions. Then roll a dice 20 times and record your findings.

1. What is the chance you will roll a six 20 times in a row?

likely unlikely certain impossible

2. What is the chance you **don't** roll a three?

likely unlikely certain impossible

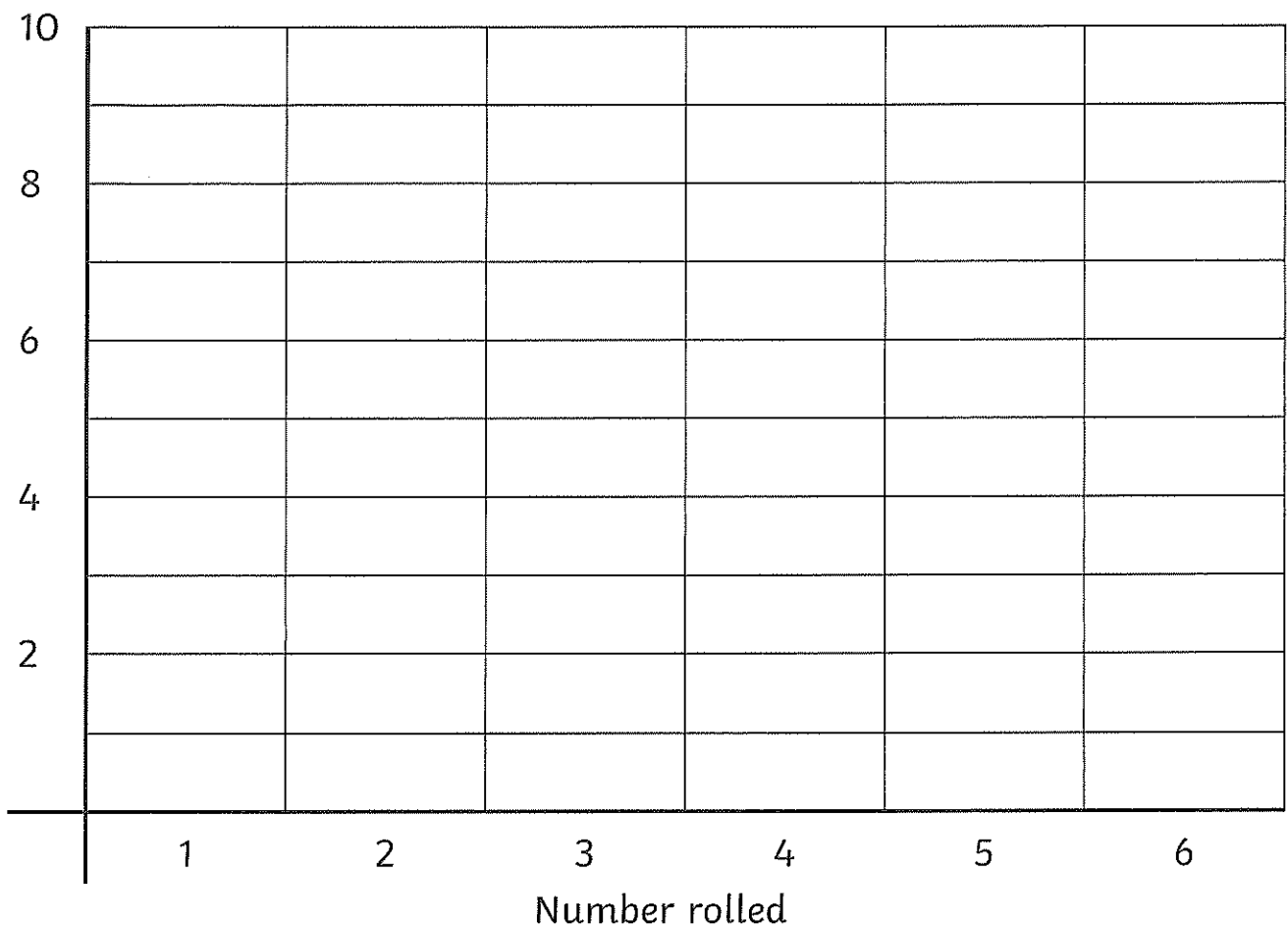
3. Are you certain you will roll a number from one to six?

4. What is the chance you will roll a ten?

5. Roll a dice 20 times and record each roll as a tally mark.

Number	Tally	Total
1		
2		
3		
4		
5		
6		

6. Show your dice data on a graph.



7. Which number occurred the most? _____

8. Which number occurred the least? _____

9. Each time you roll, what is the chance that you could roll each number?

10. If you were to repeat the 20 rolls, do you think you would roll the numbers exactly the same? Why?

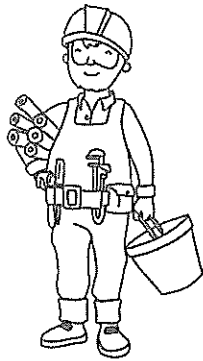
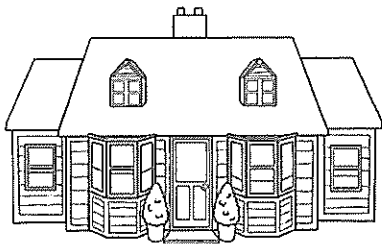
Uplevelling Sentences

Brian the Builder

First, add the missing punctuation to this sentence:

a man built a house

Next, think of some adjectives to describe the man and the house:

man	house
	

After that, answer this question. Use the linking word 'that' in your answer.

How big was the house?

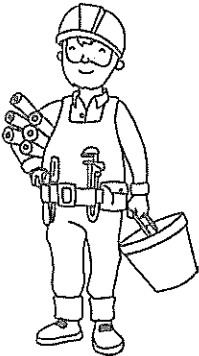
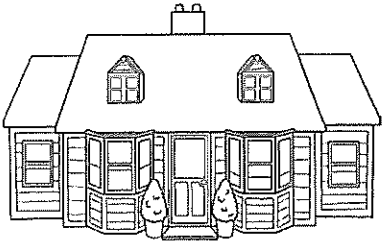
Uplevelling Sentences

Brian the Builder

First, re-write this sentence and add the missing punctuation:

a man built a house

Next, think of some adjectives to describe the man and the house:

man	house
	

Use your amazing adjectives to expand these noun phrases:

A _____ man built a
_____ house.

Next, choose one of these linking words:

because

if

when

that

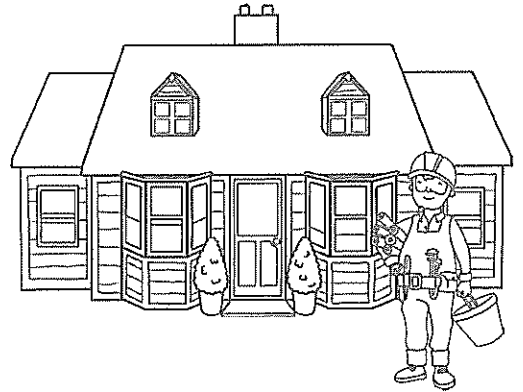
Complete your sentence by using a linking word to add some extra detail about the man or the house.

Uplevelling Sentences

Brian the Builder

Use the steps below to improve this sentence:

a man built a house



1 First, re-write the sentence including all of the correct punctuation.

1

2 Next, re-write the sentence from Step 1. Create expanded noun phrases.

2

3 Next, re-write the sentence from Step 2 but choose a linking word from the box below and use it to add extra detail to your sentence.

3

because

if

when

that

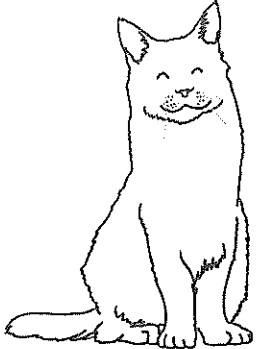
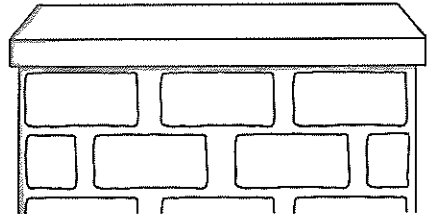
Uplevelling Sentences

Happy Cat

First, add the missing punctuation to this sentence:

the cat sat on the wall

Next, think of some adjectives to describe the cat and the wall:

cat	wall
	

After that, answer this question. Use the linking word 'because' in your answer.

Why was the cat sitting on the wall?

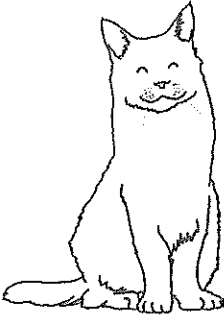
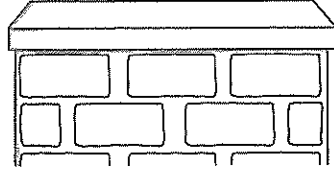
Uplevelling Sentences

Happy Cat

First, re-write this sentence and add the missing punctuation:

the cat sat on the wall

Next, think of some adjectives to describe the cat and the wall:

cat	wall
	

Use your amazing adjectives to expand these noun phrases:

The _____ cat sat on the _____ wall.

Next, choose one of these linking words:

because

if

when

that

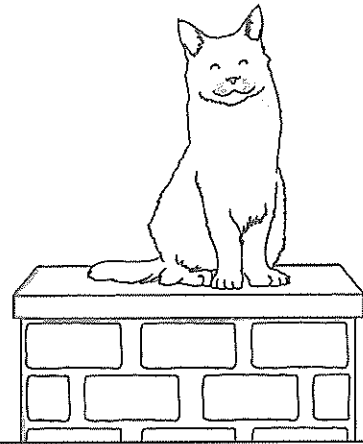
Complete your sentence by using a linking word to add some extra detail about the cat or the wall.

Uplevelling Sentences

Happy Cat

Use the steps below to improve this sentence:

the cat sat on the wall



1

First, re-write the sentence including all of the correct punctuation.

2

Next, re-write the sentence from Step 1. Create expanded noun phrases.

3

Next, re-write the sentence from Step 2 but choose a linking word from the box below and use it to add extra detail to your sentence.

because

if

when

that



Uplevelling Sentences

Hurry Up!

First, add the missing punctuation to this sentence:

jen and jess will be late

Next, think of some adjectives to describe Jen and Jess:

Jen	Jess
	

After that, answer this question. Use the linking word 'if' in your answer.

What will happen to make Jen and Jess late?

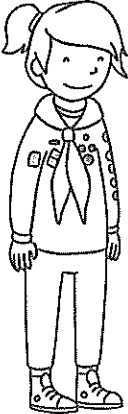

Uplevelling Sentences

Hurry Up!

First, re-write this sentence and add the missing punctuation:

jen and jess will be late

Next, think of some adjectives to describe Jen and Jess:

Jen	Jess
	

Use your amazing adjectives to expand these noun phrases:

_____ Jen and
_____ Jess will be late.

Next, choose one of these linking words:

because

if

when

that

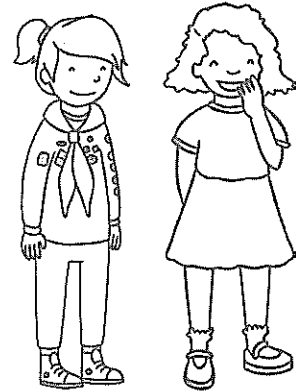
Complete your sentence by using a linking word to add some extra detail about Jen and Jess being late.

Uplevelling Sentences

Hurry Up!

Use the steps below to improve this sentence:

jen and jess will be late



1

First, re-write the sentence including all of the correct punctuation.

2

Next, re-write the sentence from Step 1. Create expanded noun phrases.

3

Next, re-write the sentence from Step 2 but choose a linking word from the box below and use it to add extra detail to your sentence.

because

if

when

that



Uplevelling Sentences

Ribbit, Ribbit!

First, add the missing punctuation to this sentence:

three frogs swam in the pond

Next, think of some adjectives to describe the frogs and the pond:

frogs	pond
	

After that, answer this question. Use the linking word 'when' in your answer.

When did the frogs swim in the pond?



Uplevelling Sentences

Ribbit, Ribbit!

First, re-write this sentence and add the missing punctuation:

three frogs swam in the pond

Next, think of some adjectives to describe the frogs and the pond:

frogs	pond
	

Use your amazing adjectives to expand these noun phrases:

Three _____ frogs swam in
the _____ pond.

Next, choose one of these linking words:

because

if

when

that

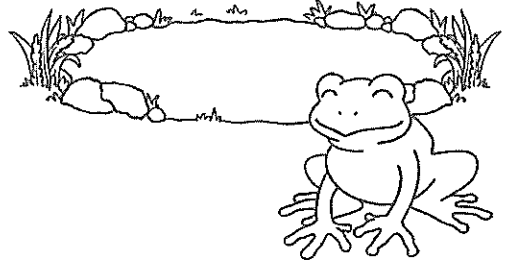
Complete your sentence by using a linking word to add some extra detail about the frogs or the pond.

Uplevelling Sentences

Ribbit, Ribbit!

Use the steps below to improve this sentence:

three frogs swam in the pond



1

First, re-write the sentence including all of the correct punctuation.

2

Next, re-write the sentence from Step 1. Create expanded noun phrases.

3

Next, re-write the sentence from Step 2 but choose a linking word from the box below and use it to add extra detail to your sentence.

because

if

when

that



Uplevelling Sentences

Twinkle, Twinkle

First, add the missing punctuation to this sentence:

i can see the stars in the sky

Next, think of some adjectives to describe the stars and the sky:

stars	sky
	

After that, answer this question. Use the linking word 'when' in your answer.

When can you see the stars in the sky?

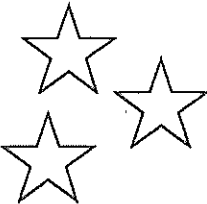

Uplevelling Sentences

Twinkle, Twinkle

First, re-write this sentence and add the missing punctuation:

i can see the stars in the sky

Next, think of some adjectives to describe the stars and the sky:

stars	sky
	

Use your amazing adjectives to expand these noun phrases:

I can see the _____ stars in
the _____ sky.

Next, choose one of these linking words:

because

if

when

that

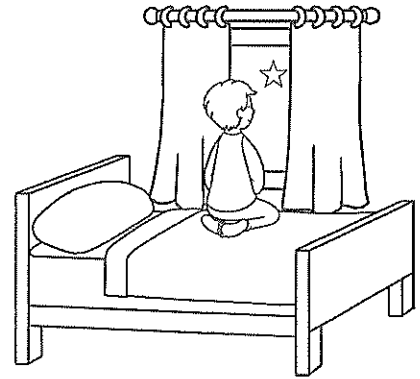
Complete your sentence by using a linking word to add some extra detail about the stars in the sky.

Uplevelling Sentences

Twinkle, Twinkle

Use the steps below to improve this sentence:

i can see the stars in the sky



First, re-write the sentence including all of the correct punctuation.

1

Next, re-write the sentence from Step 1. Create expanded noun phrases.

2

Next, re-write the sentence from Step 2 but choose a linking word from the box below and use it to add extra detail to your sentence.

3

because

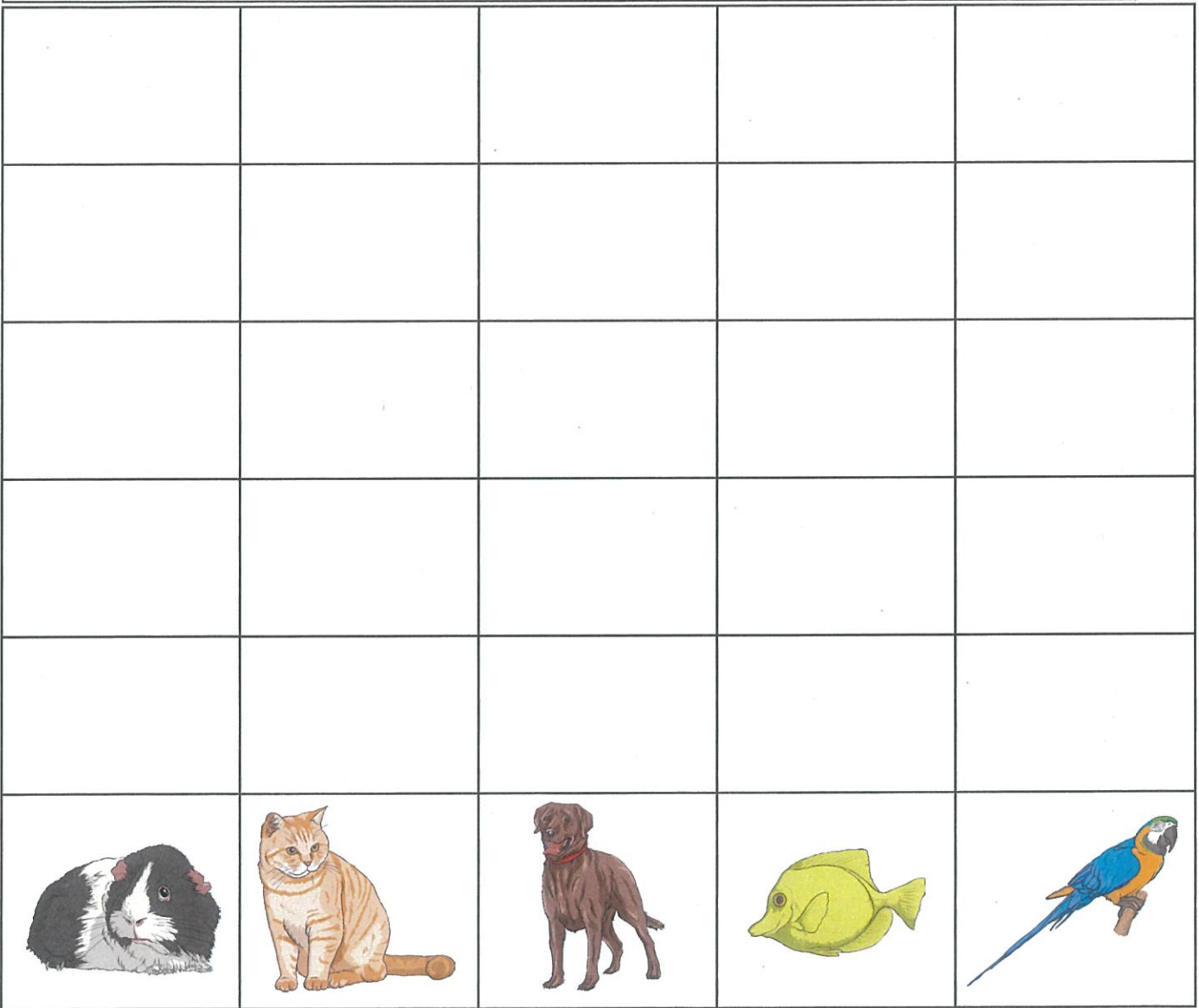
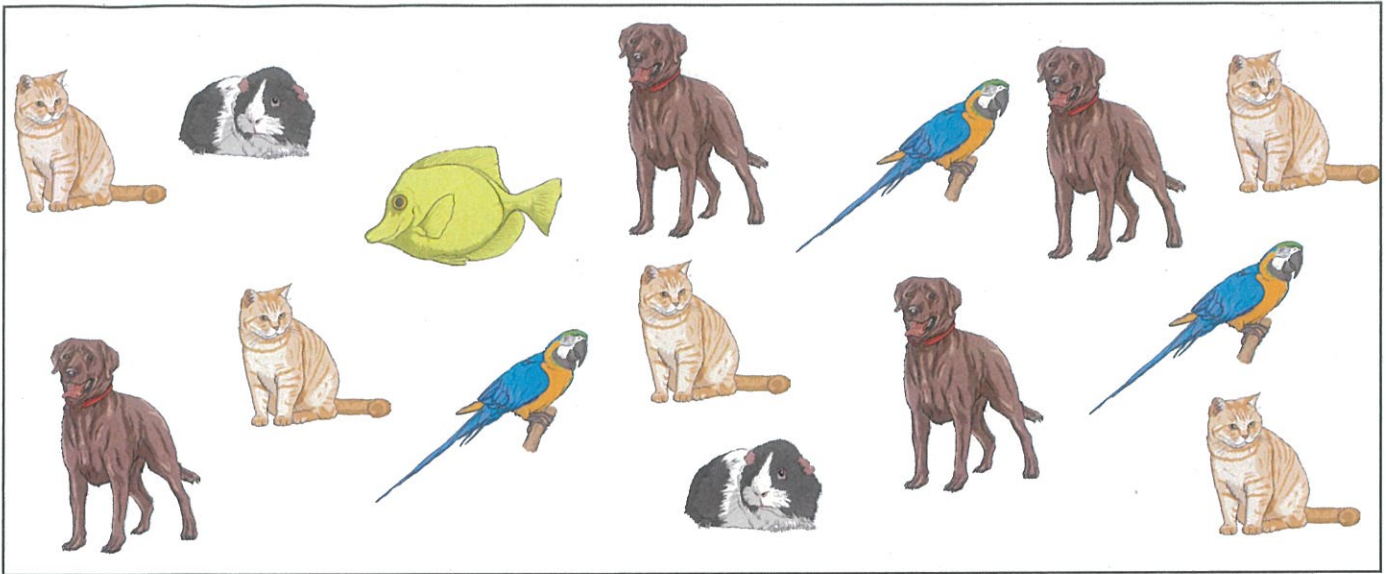
if

when

that

Pets Bar Graph

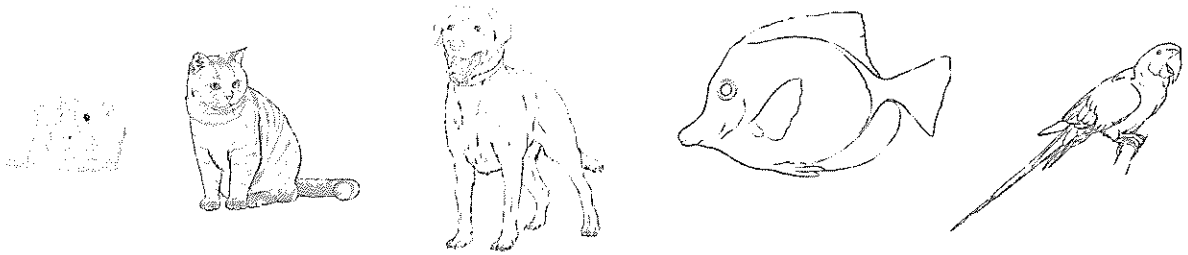
Some children were asked about their favourite pet. Complete the bar graph using the information below and then answer the questions about the graph.



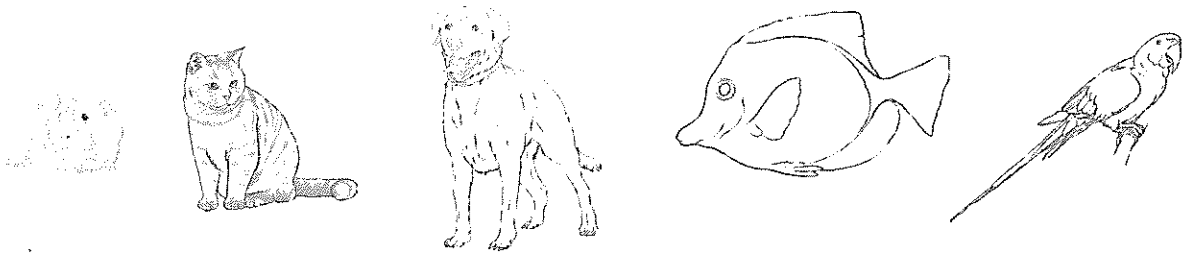
Questions

1. How many children took part in the survey? _____






2. Which animal is the most popular? Colour the picture of the animal which occurred the most.



3. Which animal is the least popular? Colour the picture of the animal which occurred the least.



Answers

5					
4					
3					
2					
1					
					

1. 15 children

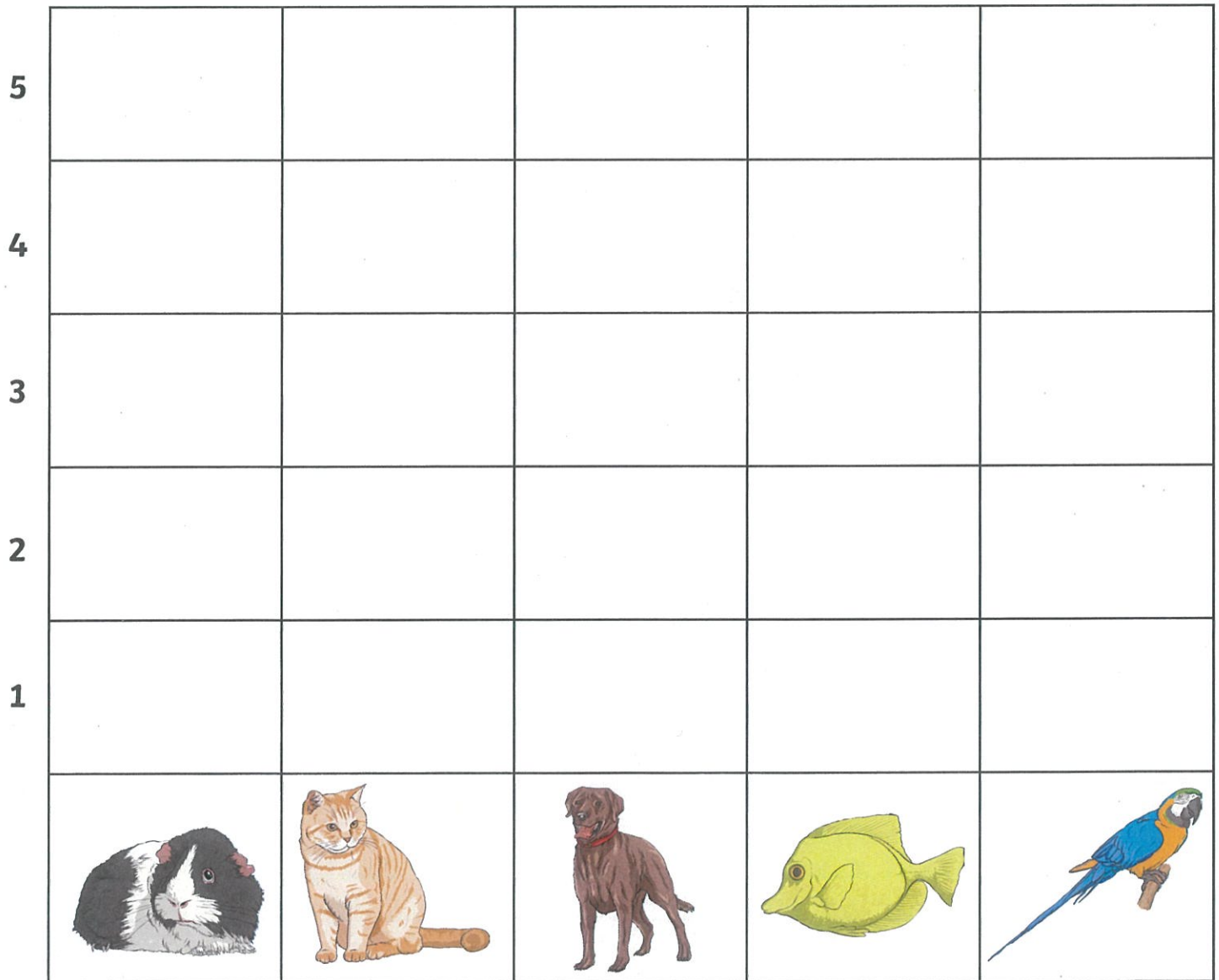
2. Cat

3. Fish

Pets Bar Graph

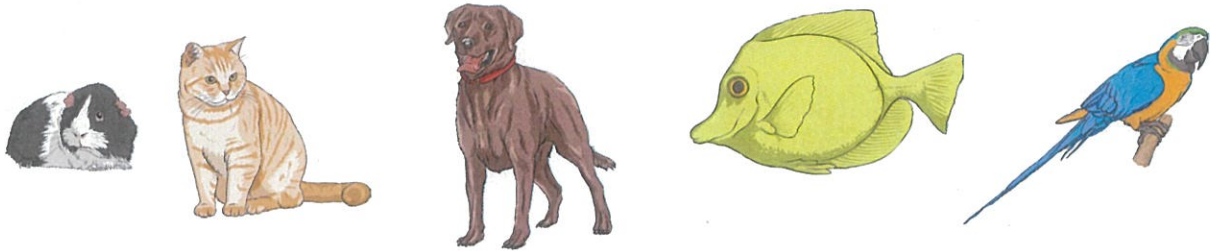
Some children were asked about their favourite pet. Complete the bar graph using the information below and then answer the questions about the graph.

Pet	Tally
Dog	
Cat	
Bird	
Fish	
Guinea Pig	

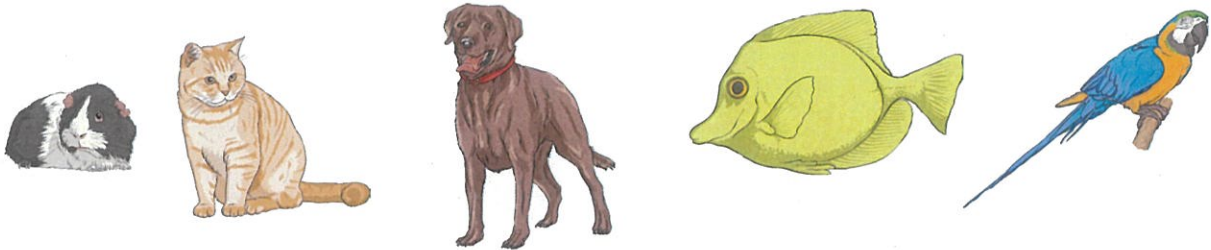


Questions

1. Which animal is the most popular? Circle the picture of the animal which occurred the most.



2. Which animal is the least popular? Circle the picture of the animal which occurred the least.








3. How many children took part in the survey? _____

4. How many children liked birds and cats? _____

5. How many children liked cats more than birds? _____

6. How many children liked dogs more than guinea pigs? _____

Answers

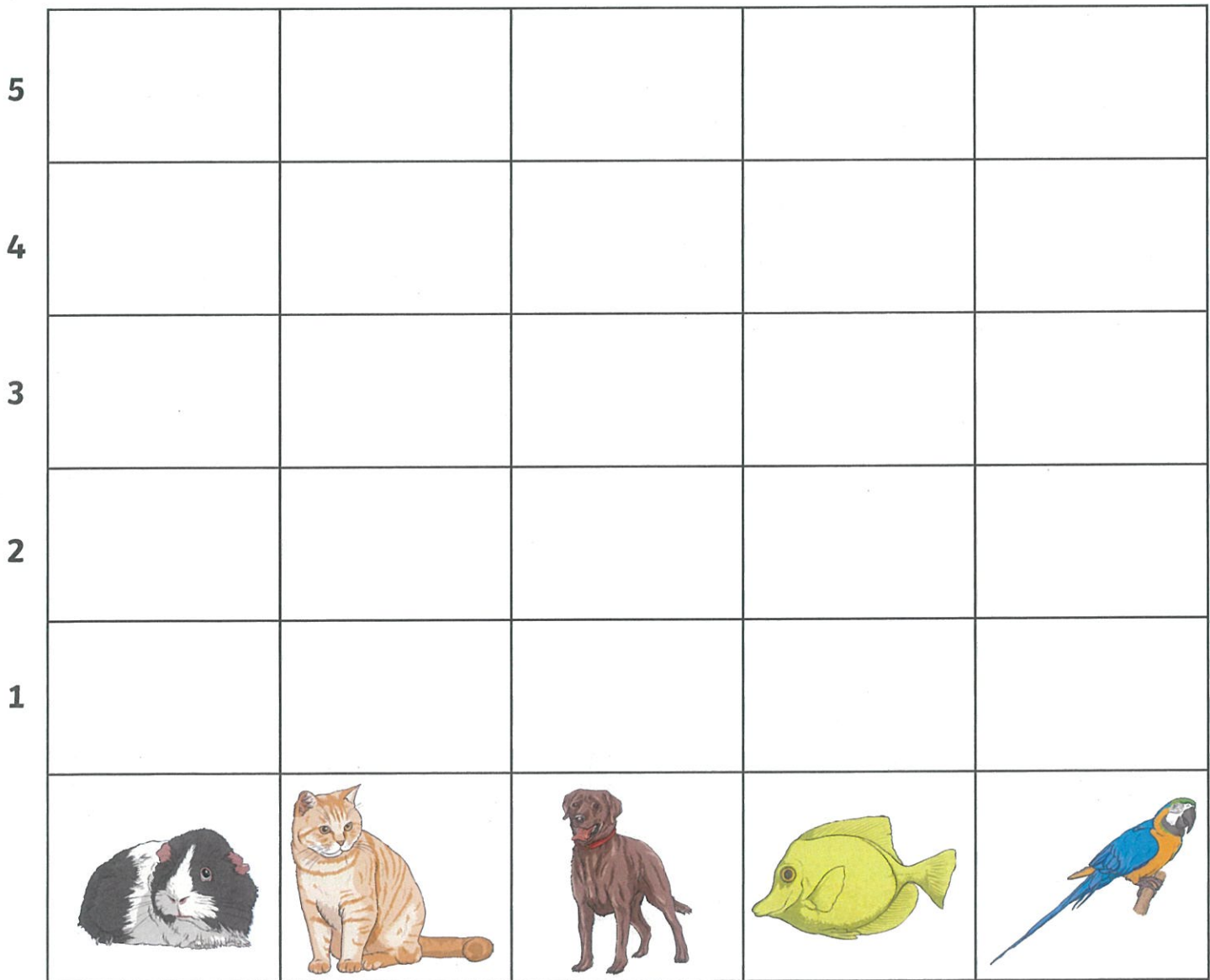
5					
4					
3					
2					
1					
					

- 1. Cat
- 2. Fish
- 3. 15 Children
- 4. 9
- 5. 2
- 6. 2

Pets Bar Graph

Some children were asked about their favourite pet. Complete the bar graph using the information below and then answer the questions about the graph.



Pet	Tally
Dog	
Cat	
Bird	
Fish	
Guinea Pig	








Questions

1. How many children took part in the survey? _____
2. Which animal is the most popular? _____
3. Which animal is the least popular? _____
4. How many children liked cats more than birds? _____
5. How many children liked dogs more than guinea pigs? _____
6. Which animal did only one child like? _____

7.  +  = _____

7.  +  = _____

Higher Ability

5					
4					
3					
2					
1					
					

1. 15

2. Cat

3. Fish

4. 2

5. 2

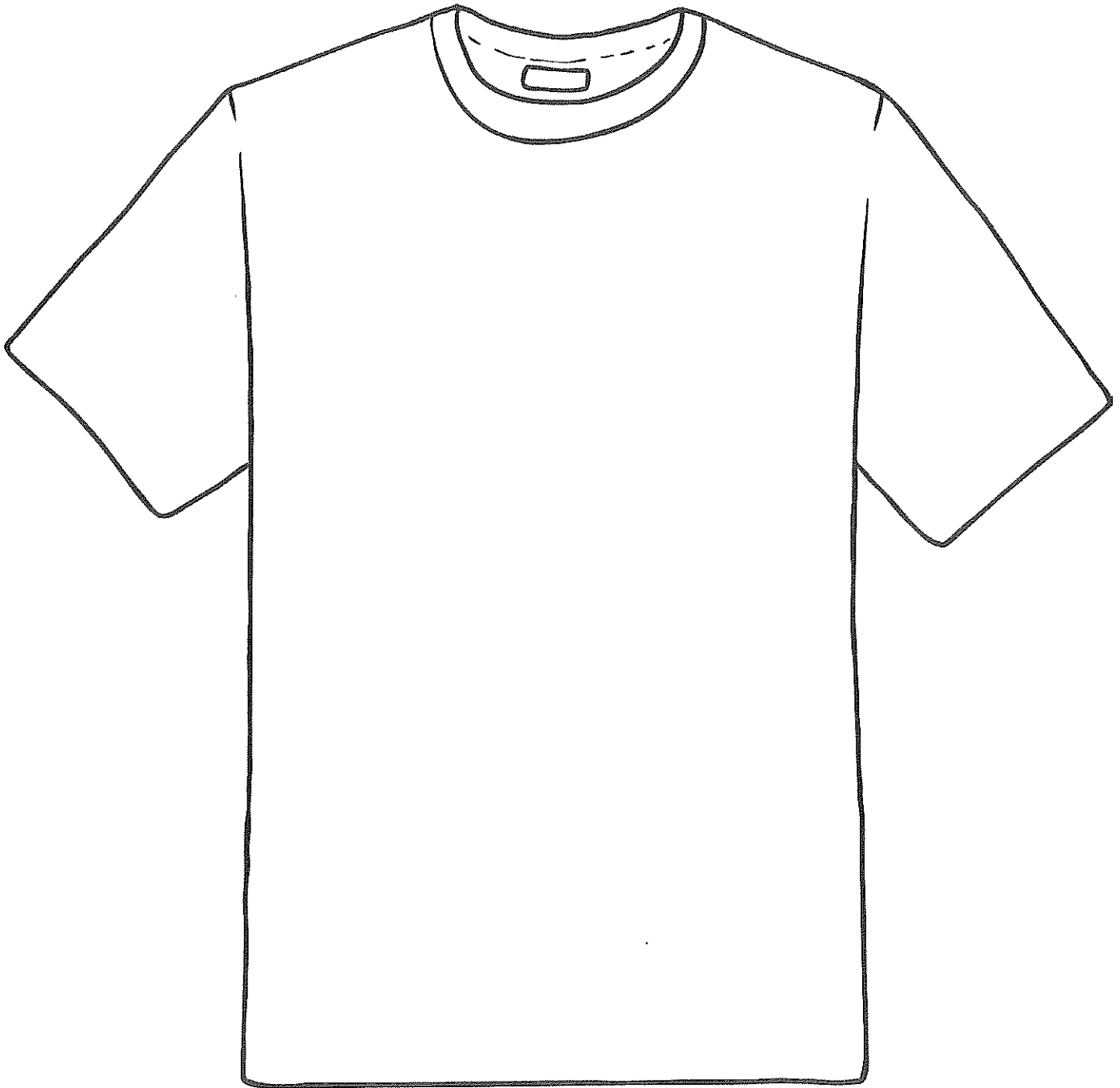
6. Fish

7. $1 + 3 = 4$

8. $5 + 4 = 9$

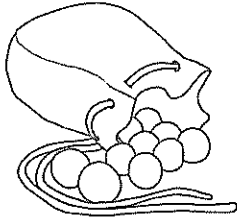
Design a Class of 2021 T-Shirt

Can you design your own class of 2021 T-Shirt? You could be inspired by a funny memory from the year, your favourite topic, or maybe just a design you like!

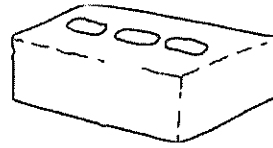


Objects and Their Movement

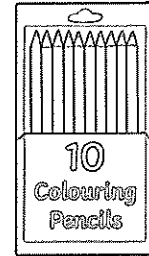
What would be best for rolling? Circle one.



Marbles



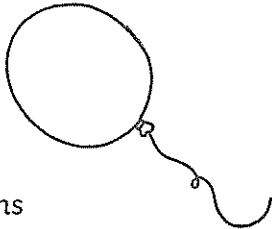
Brick



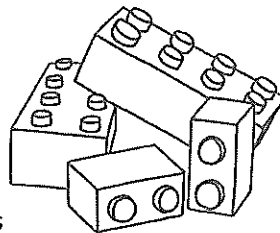
Pencil pack

Why is that the best choice?

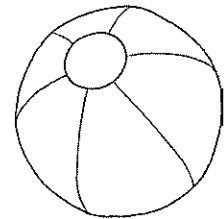
What would be best for stacking? Circle one.



Balloons



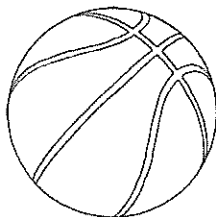
Blocks



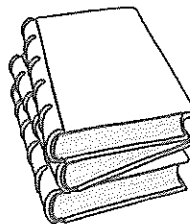
Beach balls

Why is that the best choice?

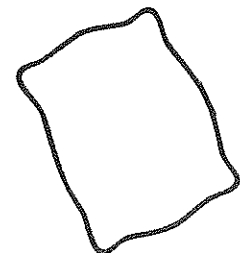
What would be best for bouncing? Circle one.



Basketball



Book



Beanbag

Why is that the best choice?

Objects Move

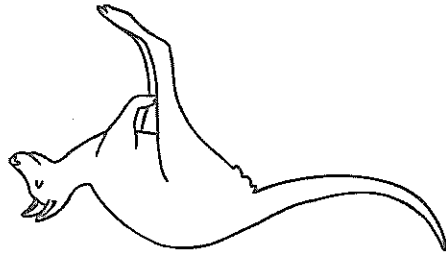
Instructions

1. Fold along all of the lines on the A3 template or a sheet of paper of your choice and follow the fold pattern. Press each fold down flat with a ruler or your fingernail.
2. Fold the sheet in half widthways and then cut along the solid line to the centre. Open the paper out and you should see that you have cut along the whole length of the solid line.
3. Now fold the paper in half lengthways so that you see a diamond shaped hole from above.
4. Push the opposite corners of the diamond shaped hole together to form the pages of your book.
5. Fold and flatten your book. Use any way you wish.

Key

- Cutting Line
- Mountain Fold
- Valley Fold

What are some ways
objects move?



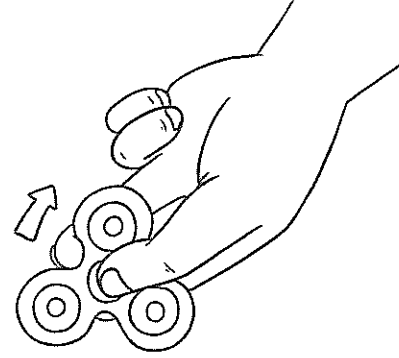
Objects can move
differently because of
their size and shape.

rolling



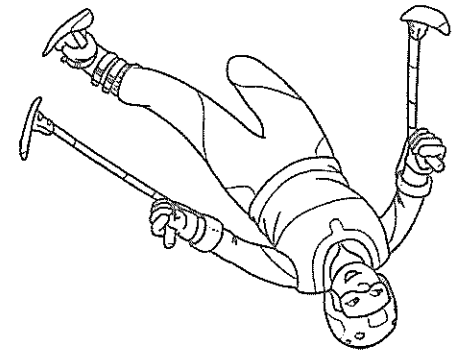
Objects can move by...

spinning



Objects can move by...

sliding



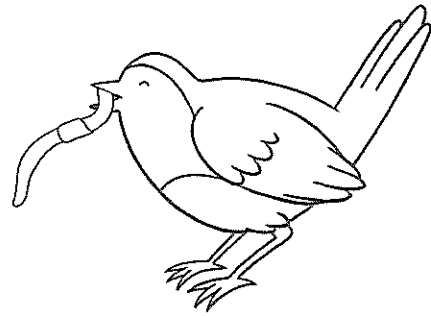
Objects can move by...

Objects can move by...



bouncing

Objects can be moved
by a...



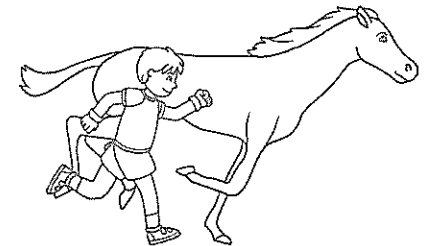
pull force

Objects can be moved
by a...



push force

Objects Move



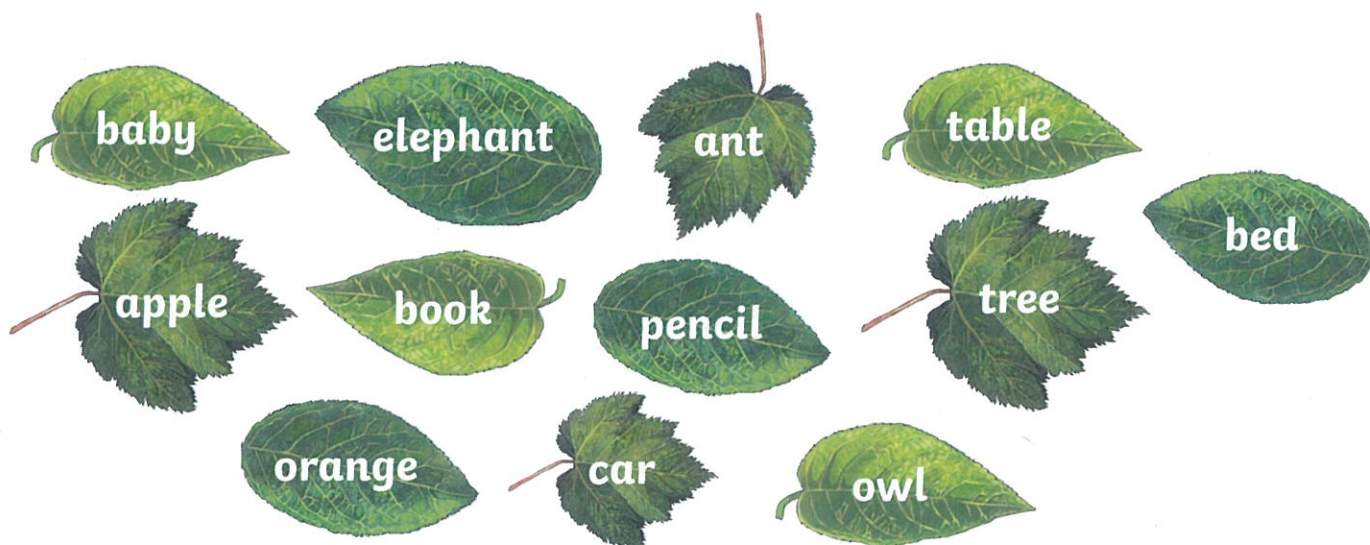
Alfie Ant's Consonants and Vowels

Grammar: 'a' or 'an'

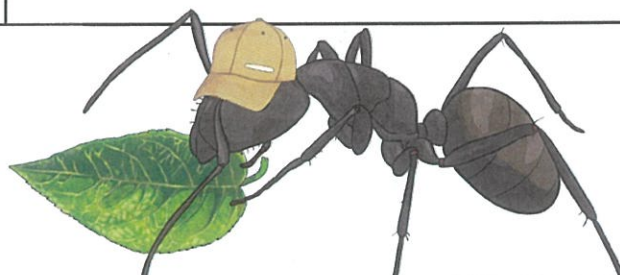
Alfie Ant needs your help! He doesn't know which letters are **vowels** and which letters are **consonants**. Look at the alphabet below. Shade the **consonants in red** and the **vowels in blue**.

a b c d e f g h i j k l m
n o p q r s t u v w x y z

Well done! Now, can you sort the words below into two columns: words that start with a **vowel** sound and words that start with a **consonant** sound.



Start with a vowel	Start with a consonant



Ant Antics

Grammar: 'a' or 'an'

Alfie Ant has a challenge for you. Look at the pictures below. You must insert either 'a' or 'an' in each space so that the sentences make sense! Be careful as some are very tricky.

Example:



It's _____ apple.

It's _____ juicy apple.



It's _____ owl.

It's _____ wise owl.



It's _____ bed.

It's _____ old bed.



It's _____ octopus.

It's _____ big octopus.



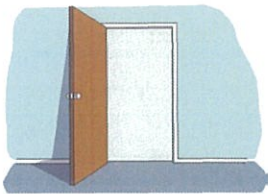
It's _____ pencil.

It's _____ purple pencil.



It's _____ onion.

It's _____ huge onion.



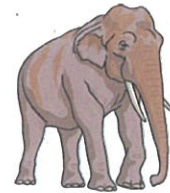
It's _____ door.

It's _____ open door.



It's _____ monster.

It's _____ blue monster.



It's _____ elephant.

It's _____ angry elephant.



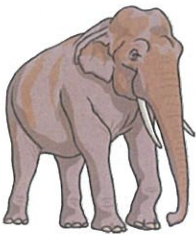
Alfie's Sentences

Grammar: 'a' or 'an'

Alfie Ant has written some sentences but he isn't sure whether he has to use 'a' or 'an'. Can you help him by circling the right one in each sentence?

1. On a branch, sat **a / an** wise, old owl.
2. Luke kicked **a / an** orange ball into the air.
3. Through her telescope, Tia saw **a / an** old man on the moon.
4. **A / An** ambulance rushed along the street.
5. The building had **a / an** emergency exit in case of a fire.
6. Martin ate **a / an** delicious apple.
7. Patrick had **a / an** multicoloured pencil.
8. The singer gave **a / an** interview on live TV.

Challenge: Now try and write a sentence about each picture below and include 'a' or 'an'.



elephant



dragon



Tricky Words

Grammar: 'a' or 'an'

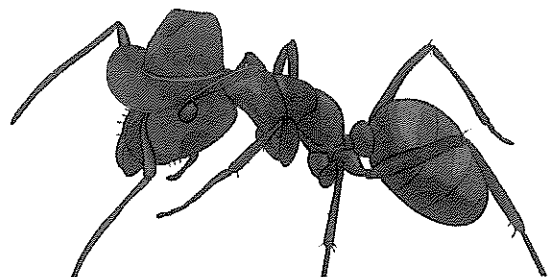
Most of the time, we add 'a' before words that start with consonants and 'an' before words that start with a vowel. However, which would you use in this sentence?

The boy had **a / an** unique talent.

In this sentence the article used should be 'a' as the 'u' in unique is making the consonant sound /y/. If the first letter of a word makes a consonant sound, you place 'a' before it but, if the first letter of a word makes a vowel sound, you place 'an' before the word.

Have a go at the sentences below. Should it be 'a' or 'an'? Circle the correct answer

1. I arrived **a / an** hour early for the party.
2. The story took place in **a / an** universe far from ours.
3. The police officer wore **a / an** uniform.
4. In the magical forest, Betty saw **a / an** unicorn.
5. Pinocchio wasn't always **a / an** honest boy.
6. On holiday, we needed **a / an** universal adaptor for the plug.
7. They were looking for **a / an** heir to the throne.



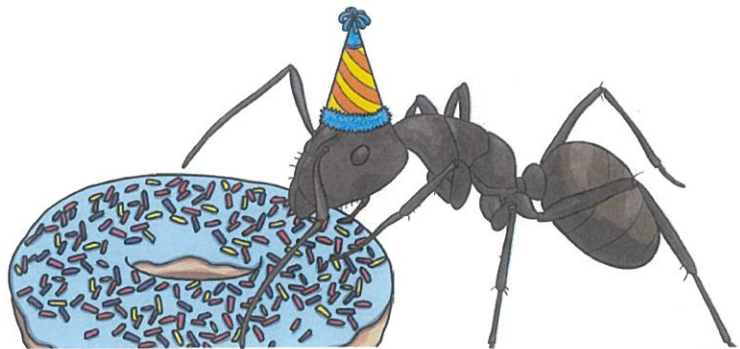
Alfie Ant's Story

Grammar: 'a' or 'an'

Here is a story about Alfie Ant and a very long journey that he went on. However, there are many mistakes when using the articles 'a' or 'an'. See if you can spot the mistakes in the story and change them.

Circle the mistakes and write the correct article above.

There once was a ant called Alfie, who liked to eat food. One day, whilst looking for food, he went through a open door and entered an supermarket. What an lucky ant he was! Quickly, he began to have an taste of everything he could find. He ate a orange, a apple, an lettuce, an egg and a avocado. He had an small nibble of each item but he didn't feel satisfied. Next, he went along a aisle with sweets and chocolate. On one shelf, he saw an unique chocolate bear which he had to try, but as he began to climb onto the shelf something caught his eye. Further along, he saw a enormous doughnut with sweet, sticky icing. He licked his lips and headed in an new direction. He climbed onto an sweet bed of blue icing with an coating of sugary sprinkles on top. He nibbled, licked, pecked, gnawed, chewed, and slurped up all the icing until there wasn't an sprinkle of it left. Finally, with an bulging tummy, he went to sleep right there on the supermarket shelf.



Grammar: Using 'A' or 'An' Answers

page 1. Alfie Ant's Consonants and Vowels.

a b c d e f g h i j k l m
n o p q r s t u v w x y z

Start with a consonant	Start with a vowel
baby car book pencil tree table bed	apple orange elephant ant owl

page 2. Ant antics.

It's an apple.
It's a juicy apple

It's an octopus.
It's a big octopus

It's a door.
It's an open door.

It's an owl.
It's a wise owl.

It's a pencil.
It's a purple pencil.

It's a monster.
It's a blue monster.

It's a bed.
It's an old bed.

It's an onion.
It's a huge onion.

It's an elephant.
It's an angry elephant.

Grammar: Using 'A' or 'An' Answers

page 3. Alfie's Sentences.

1. On a branch, sat **a** wise, old owl.
2. Luke kicked **an** orange ball into the air.
3. Through her telescope, Tia saw **an** old man on the moon.
4. **An** ambulance rushed along the street.
5. The building had **an** emergency exit in case of a fire.
6. Martin ate **a** delicious apple.
7. Patrick had **a** multicoloured pencil.
8. The singer gave **an** interview on live TV.

page 4. Tricky Words.

1. I arrived **an** hour early for the party.
2. The story took place in **a** universe far from ours.
3. The police officer wore **a** uniform.
4. In the magical forest, Betty saw **a** unicorn.
5. Pinocchio wasn't always **an** honest boy.
6. On holiday, we needed **a** universal adaptor for the plug.
7. They were looking for **an** heir to the throne.

Grammar: Using 'A' or 'An' Answers

page 5. Alfie Ant's Story.

There once was an ant called Alfie, who liked to eat food. One day, whilst looking for food, he went through an open door and entered a supermarket. What a lucky ant he was! Quickly, he began to have a taste of everything he could find. He ate an orange, an apple, a lettuce, an egg and an avocado. He had a small nibble of each item but he didn't feel satisfied. Next, he went along an aisle with sweets and chocolate. On one shelf, he saw a unique chocolate bear which he had to try, but as he began to climb onto the shelf something caught his eye. Further along, he saw an enormous doughnut with sweet, sticky icing. He licked his lips and headed in a new direction. He climbed onto a sweet bed of blue icing with a coating of sugary sprinkles on top. He nibbled, licked, pecked, gnawed, chewed, and slurped up all the icing until there wasn't a sprinkle of it left. Finally, with a bulging tummy, he went to sleep right there on the supermarket shelf.

Coin Flip Investigation

Name: _____

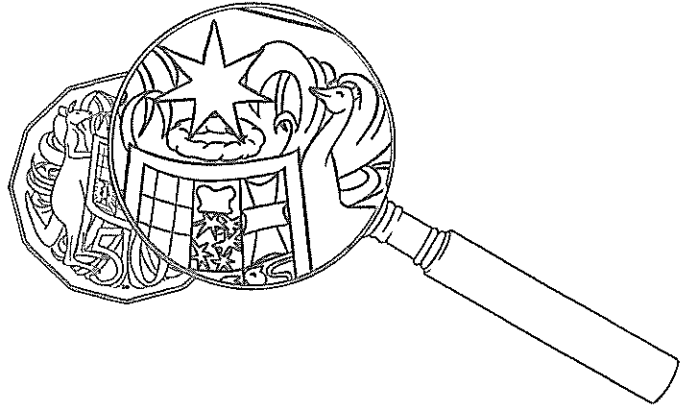
Date: _____

I can identify events where the chance of one will not be affected by the occurrence of the other.
(ACMSP094)

Flip one coin 10 times and record each flip as a tally mark.

Equipment I will need:

- 1 x coin
- pencil
- activity sheet



Instructions:

1. Flip the coin.
2. Record the result as a tally mark whether the coin landed on 'heads' or 'tails' in the correct space in the table below.
3. Repeat steps 1 and 2 nine more times (so that you have flipped the coin 10 times).

Coin Flip Results for 10 Flips:

	Tally	Total
Heads		
Tails		

You are now going to repeat the experiment but for 20 flips. Make a prediction on what you think the results will be. Will it be the same as your first set? Why/why not?

My prediction is: _____

Complete the coin flip chance experiment again.

Coin Flip Results for 20 Flips:

	Tally	Total
Heads		
Tails		

Was your prediction correct? Why/why not?

If you were to complete this chance experiment again for 40 flips, do you think the results would be the same? Why/why not?

If you flipped heads five times and tails fifteen times, does this mean that tails will also have the larger number of flips next time you complete this activity? Why/why not?



Chance and Data Dice Roll

Answer the chance questions. Then roll a dice 20 times and record your findings.

1. What is the chance you will roll a six 20 times in a row?

likely unlikely certain impossible

2. What is the chance you **don't** roll a three?

likely unlikely certain impossible

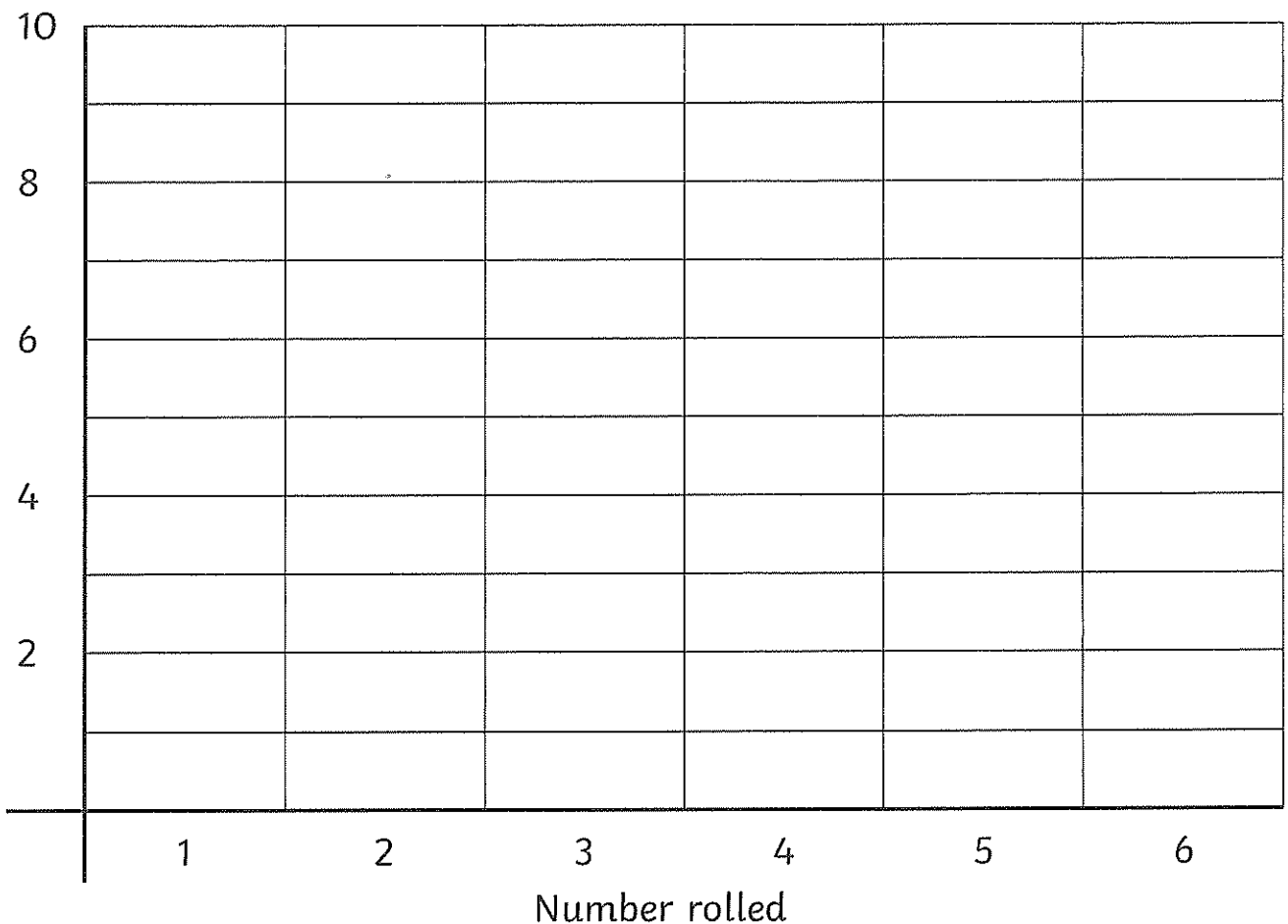
3. Are you certain you will roll a number from one to six?

4. What is the chance you will roll a ten?

5. Roll a dice 20 times and record each roll as a tally mark.

Number	Tally	Total
1		
2		
3		
4		
5		
6		

6. Show your dice data on a graph.



7. Which number occurred the most? _____

8. Which number occurred the least? _____

9. Each time you roll, what is the chance that you could roll each number?

10. If you were to repeat the 20 rolls, do you think you would roll the numbers exactly the same? Why?

Chance Jars



1. What is the chance you will choose a square?



2. What is the chance you will choose a triangle?



3. What is the chance you will choose a circle?

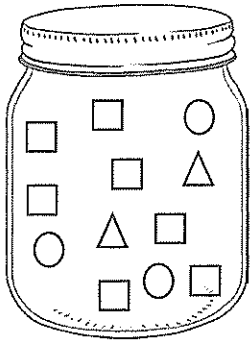


4. What is the chance you will choose a triangle?

Challenge

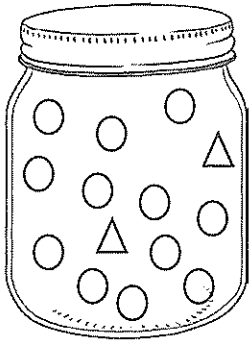
Draw your own chance jar and write a chance question for a friend to answer.

Chance Jars Answers



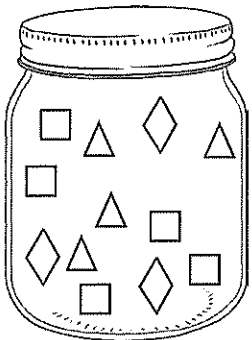
1. What is the chance you will choose a square?

likely



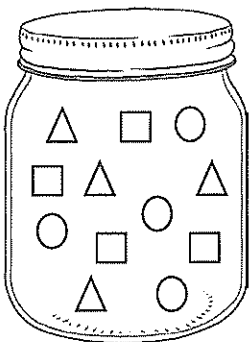
2. What is the chance you will choose a triangle?

unlikely



3. What is the chance you will choose a circle?

impossible



4. What is the chance you will choose a triangle?

even chance

Challenge

Draw your own chance jar and write a chance question for a friend to answer.

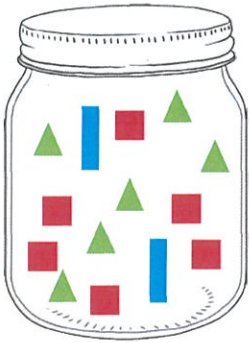
Chance Jars



1. What is the chance you will choose a circle?



2. What is the chance you will choose a diamond?



3. What is the chance you will choose a rectangle?



4. What is the chance you will choose a square?

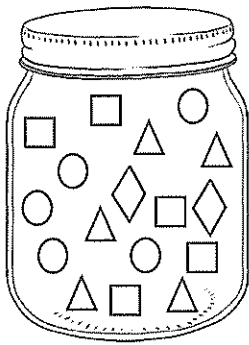


5. What is the chance you will choose a triangle?

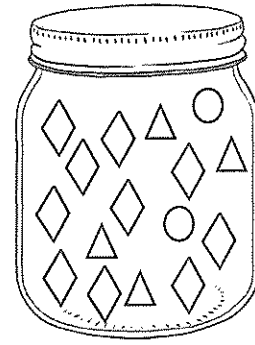


6. What shape do you have the most likely chance of choosing?

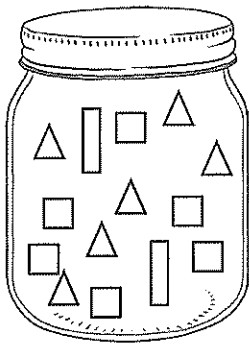
Chance Jars Answers



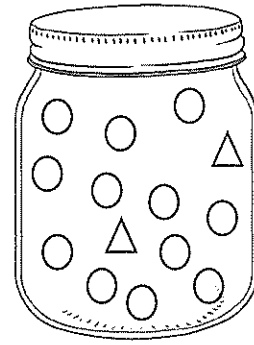
1. What is the chance you will choose a circle?
you have an even chance



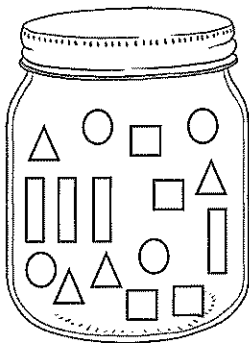
2. What is the chance you will choose a diamond?
likely



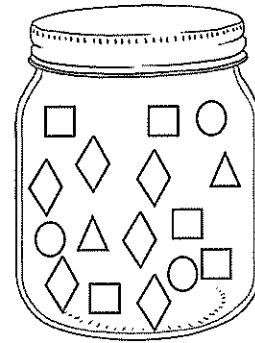
3. What is the chance you will choose a rectangle?
unlikely



4. What is the chance you will choose a square?
impossible



5. What is the chance you will choose a triangle?
even chance



6. What shape do you have the most likely chance of choosing?
a diamond

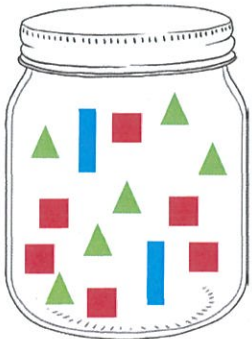
Chance Jars



1. What shape are you unlikely to choose? Why?



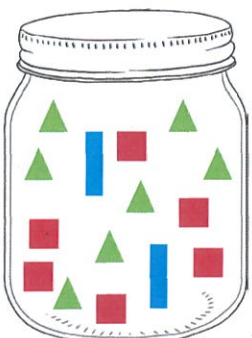
2. If there were double the amount of circles, would you be very likely to choose one?



3. How many more rectangles do you need to have an even chance of choosing one?

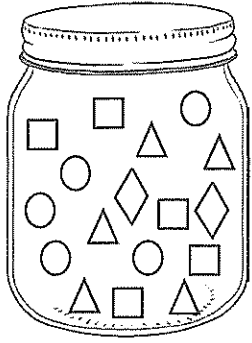


4. It is certain you will choose a circle.
True or false? Why?



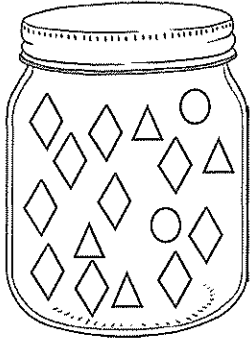
5. What shape has the highest chance of being chosen?
Why?

Chance Jars Answers



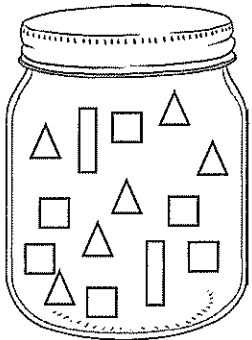
1. What shape are you unlikely to choose? Why?

You are unlikely to choose a diamond because there are only two diamonds and 15 other shapes.



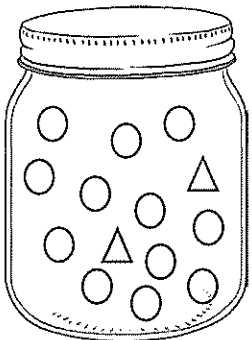
2. If there were double the amount of circles, would you be very likely to choose one?

No. It would still be unlike as there would be four circles and 14 other shapes.



3. How many more rectangles do you need to have an even chance of choosing one?

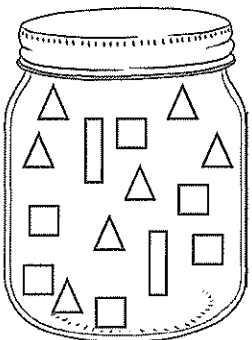
Four more rectangles.



4. It is certain you will choose a circle.

True or false? Why?

False. It is likely but there are two chances of choosing a triangle.



5. What shape has the highest chance of being chosen? Why?

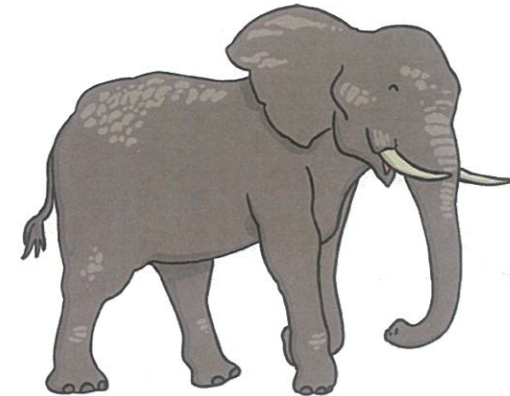
You have the highest chance of choosing a triangle because there are more triangles than the other shapes.

Chance Challenge Cards



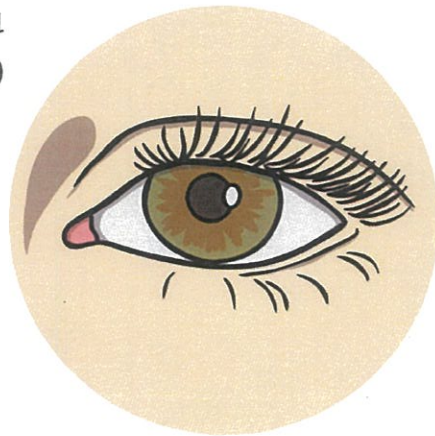
Chance

What is the chance you will ride to school on an elephant?



Chance

What is the chance you will blink about 15-20 times per minute?



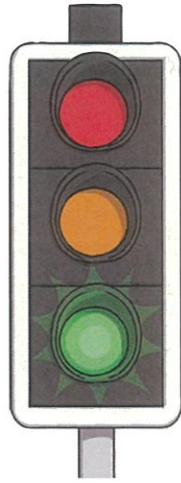
Chance

What is the chance our dog might tip over his water bowl?



Chance

What is the chance the traffic lights on the main road will change from green to red?



Chance

What is the chance that your mum will take you shopping this afternoon?



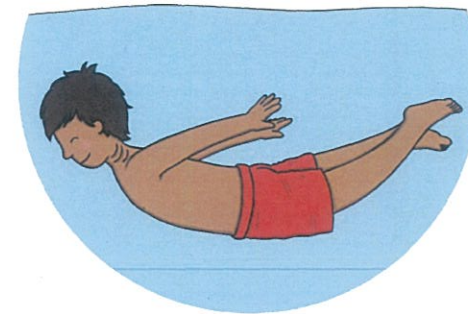
Chance

What is the chance it will be a rainy day tomorrow?



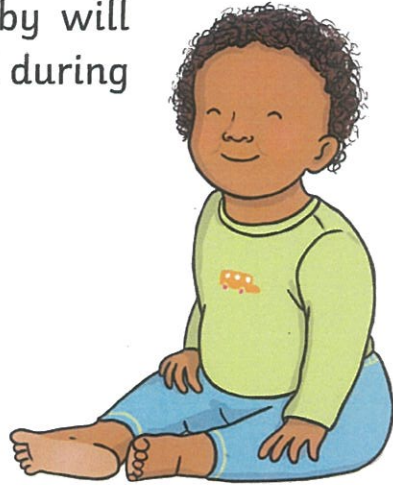
Chance

What is the chance I will grow gills and be able to breathe underwater?



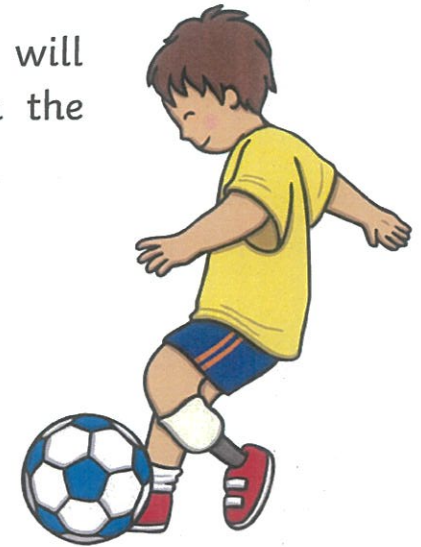
Chance

What is the chance a baby will need their nappy changed during the day?



Chance

What is the chance you will win your sports game on the weekend?



Chance

What is the chance you will grow wings and fly?



Chance

What is the chance it could be someone's birthday in your class this week?



Year 3 NAPLAN

Chance and Data

Challenge Cards



Conduct Chance Experiments NAPLAN - Chance and Data

Play 'Rock, Scissors, Paper' with a classmate for at least 20 rounds, recording what each player chose and who won each game.

Did rock, paper or scissors win the most games? If you were to play again, do you think you would get the same results? Explain your thinking.

Conduct Chance Experiments NAPLAN - Chance and Data

Put a collection of counters into a bag, cup or bowl. Record the collection of colours you chose. Now, take one counter out at a time without looking and record the colour pulled out, before returning it to the rest.

Do this at least 20 times and record your results. What colour did you pick the most? Do you think if you ran the experiment again you would get the same result? Explain your thinking.

Conduct Chance Experiments NAPLAN - Chance and Data

Scrunch up a piece of scrap paper and try to toss it into a recycling bin, cup or container. Have at least 20 attempts and record your results.

How often did you hit your target? How could you change your result to be more or less likely?

Least to Most Likely

NAPLAN - Chance and Data

Make a probability scale of things that will happen in your week. At one end, think of something that is certain to happen, such as the sun rising.

At the other end, think of something that is impossible, such as you growing wings and flying home. Can you order at least 15 things from least likely to most likely?



impossible

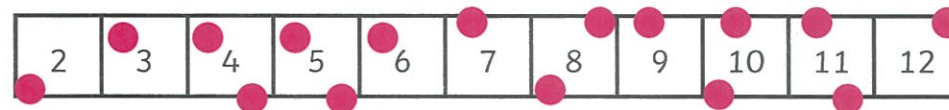


possible

Explore Probability

NAPLAN - Chance and Data

Play a counter and dice game with a partner. You each have 15 counters and a 1-6 dice. Make a game board by numbering some boxes 2-12 like you see below. Now place your counters in any boxes you like, you can spread them out or stack them all in one box. Now roll your dice twice and add the numbers together. If you have a counter in that box, you can take it out. The winner is the player to remove all their counters first.



What is a winning strategy and why?



Explore Likelihood

NAPLAN - Chance and Data

Have you noticed when playing games of luck, that the chances of getting what you need to win changes, such as a game of cards where other players pick up cards. Other times, the chance doesn't change, such as rolling a dice.

Each turn	Not sure	Chance doesn't change
-----------	----------	-----------------------

Sort the following into the columns, then add your own ideas:

Flipping a coin

Playing rock, paper, scissors

Choosing a counter from a bag

Guessing a number

Explore Likelihood

NAPLAN - Chance and Data

Put a collection of counters into a bag, cup or bowl. Record the collection of colours you chose. Take one counter out at a time without looking and record the colour you got, before returning it to the rest.

Do this at least 10 times and record your results. Now try the experiment again but don't put the counters back this time. Were your results the same or different and why do you think that is?

Collect Data

NAPLAN - Chance and Data

Pick a question you would like to ask your classmates that has a couple of options, for example 'What is your favourite ____ ?' We are going to try three different ways of collecting data to see how this affects your results.

1. Ask at least 10 classmates your question and record their responses.
2. Ask at least 10 classmates again, but this time give them 4 options to choose from.
3. This time, only ask a particular type of person, for example you might only ask classmates who really like sport or drawing, people with pets, or perhaps only girls or boys.

What did you notice?

Organise Data

NAPLAN - Chance and Data

Find at least 20 different objects from around your classroom and record what you collected. How could you sort your objects into categories for graphing?

Sort your objects at least three different ways and graph the results.

Display Data

NAPLAN - Chance and Data

Collect some data to graph. You could gather some blocks, conduct a quick survey, roll dice or flip a coin at least 20 times.

When you have your data, try graphing it at least 3 different ways. You could try a pictograph, table, column or row graph, dot plot, line graph or even a pie chart if you would like a challenge.

What kind of graph suited your data best? Explain your thinking.

Estimate and Graph

NAPLAN - Chance and Data

Pick a question you would like to ask your classmates that has a couple of options, for example 'What is your favourite ____ ?'

Before we ask our classmates, we are going to make a graph guessing what we think the results will be. Make a 3D graph by stacking some different coloured blocks into a column graph. Ideally use linking blocks so it's more likely to stay together.

Now go and survey your classmates and adjust your graph as needed. How accurate was your estimating graph and did the results surprise you?