



REPRODUCIBLE ACTIVITIES TO ACCOMPANY:

THE TRUE STORY OF CHARLIE THE CICADA



CICADA FACTS

Cicadas live in most areas of Australia from the tropics of Queensland to the snowfields of Tasmania. There are more than 200 species of cicadas in Australia.

LIFE CYCLE

There are three distinct stages in the life of a cicada

1. The Egg

The female adult uses her saw like tail to cut slits in the bark where she deposits the eggs.

The eggs remain in their little nursery for some weeks before hatching into nymphs.

2. The Nymph

The freshly hatched nymphs float softly to the ground where they burrow into the soil.

Cicadas spend most of their lives living as nymphs – in Northern American cicadas, this stage can last for 17 years.

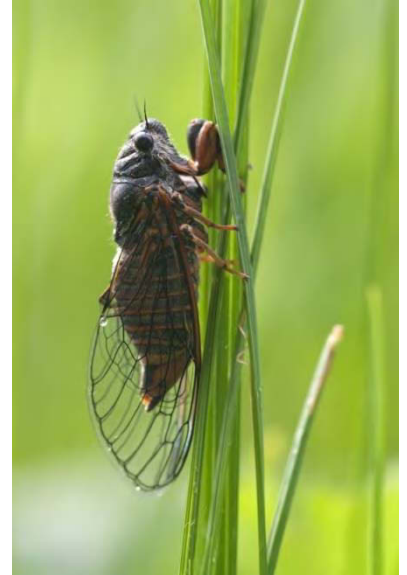
For most suburban Australia cicadas the nymph stage is about seven years. This can vary and may even be shorter in good conditions. The nymph sheds its skin regularly.

3. The Adult Cicada

When the nymph is fully mature it crawls out of its underground home, climbs a tree and sheds its skin one last time. Wings emerge and the adult cicada is ready to mate.

FOOD:

Plant sap



Green Grocer Cicada



Cicada Facts continued

MATING HABITS:

Only male cicadas sing in order to attract a mate. The sound is produced by a pair of membranes at the base of the abdomen. Different species have their own song in order to attract cicadas of their own kind. The cicada song is the loudest in the insect world and may reach 120 decibels - loud enough to repel birds and possibly other predators too.

BODIES

- Cicadas have large compound eyes on each side of the head and three simple eyes on the top of the head.
- Cicadas have three pairs of legs and two pairs of wings

Children have given names to Australian cicadas.

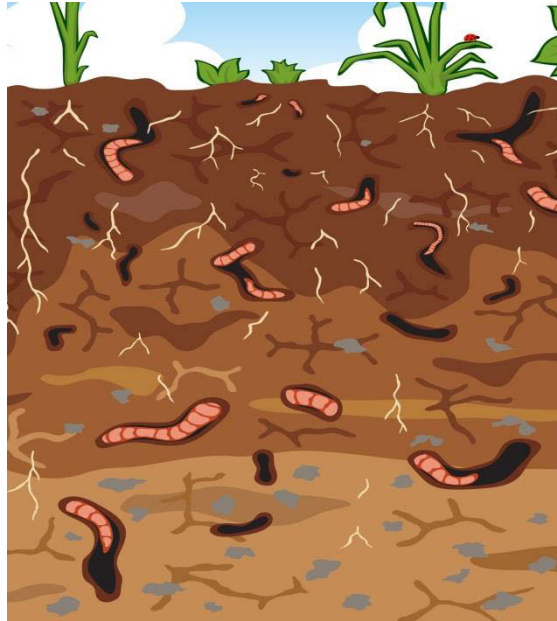
Exotic names include:

- Green Grocer
- Floury Baker
- Black Prince
- Yellow Monday
- Double Drummer

The Green Grocer has adapted well to suburban gardens and may be heard from early November, dying out by the end of December.



The cicada is on the tree.

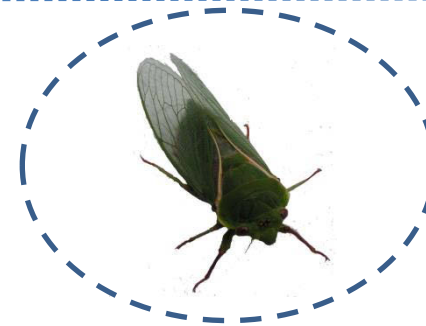
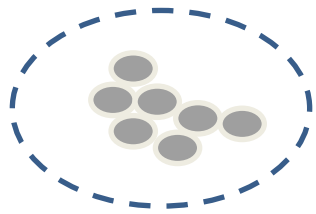


The nymph is under the ground.



The eggs are on the branch.

Can you cut out and paste the cicada pictures into the right places above?



See 'Cicada fact's and 'The True Tale of Charlie the Cicada' for more information about cicadas.

SECRETS OF A CICADA

Can you use the words below to complete the gaps in the sentences?

ground sheds slit
male roots wings



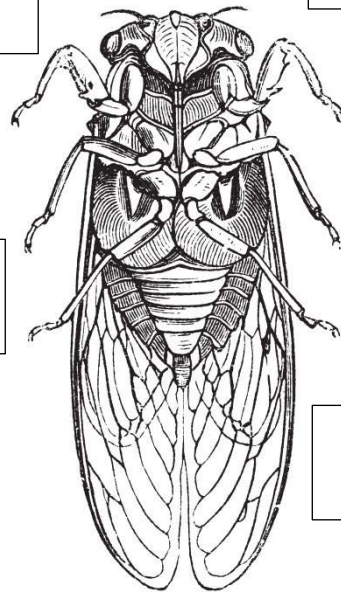
The skin or exoskeleton of an adult cicada.

1. The _____ cicada sings to attract a mate.
2. A female cicada uses her tail to make a _____ in the branch of a tree. There she lays her eggs.
3. A cicada nymph feeds on the sap from the _____ of trees.
4. As the cicada nymph grows, it _____ its skin.
5. When the nymph is fully grown, it climbs above the _____.
6. The adult cicada sheds its skin for the last time and grows _____ so that it can fly.

See 'Cicada fact's and 'The True Tale of Charlie the Cicada' for more information about cicadas.

Can you label the parts of the cicada with the words below?

compound eyes wings legs mouth antennae

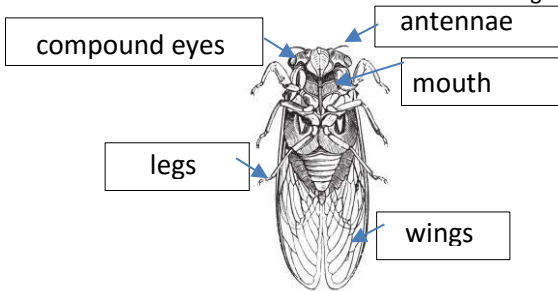


See next page for solutions.

See 'Cicada fact's and 'The True Tale of Charlie the Cicada' for more information about cicadas.

Solutions

1. The male cicada sings to attract a mate.
2. A female cicada uses her tail to make a slit in the branch of a tree. There she lays her eggs.
3. A cicada nymph feeds on the sap from the roots of trees.
4. As the cicada nymph grows, it sheds its skin.
5. When the nymph is fully grown, it climbs above the ground.
6. The adult cicada sheds its skin for the last time and grows wings so that it can fly.



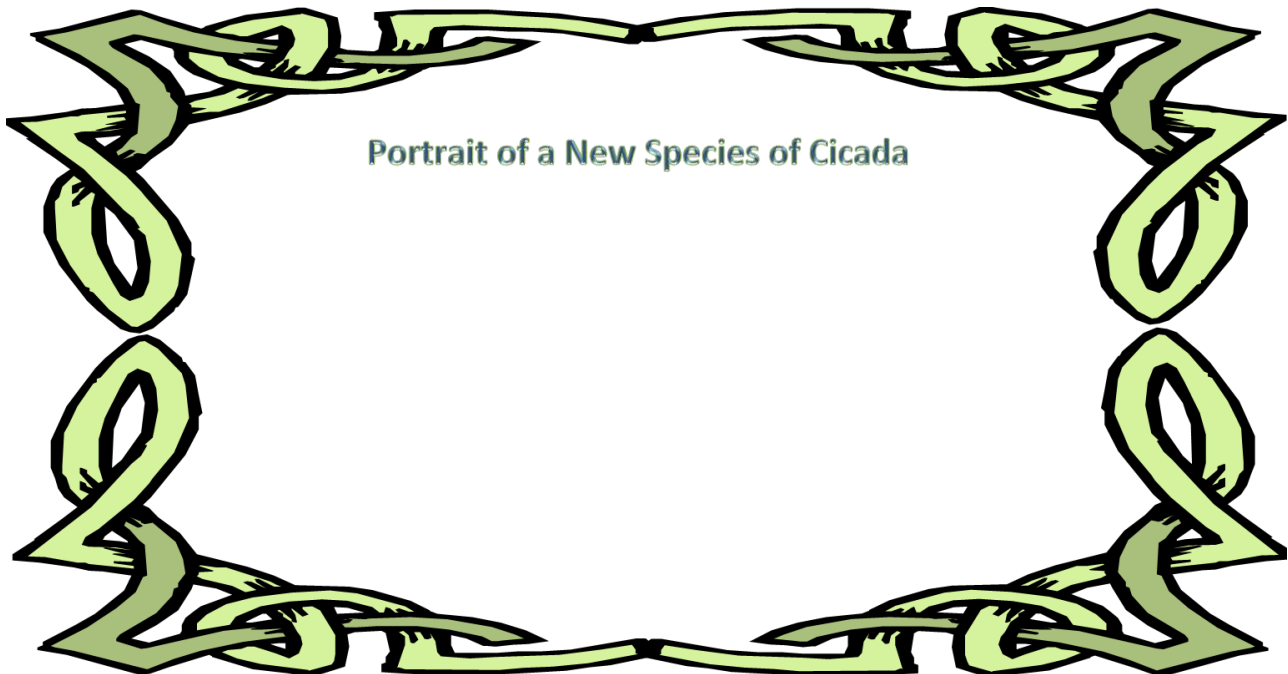
CICADA WORDFIND

Can you find these words on the grid below?

cicada	nymph	tree	roots	wings	sing
hatch	eggs	skin	bark	underground	soil
sap	branch				

The words appear vertically and horizontally. Use different colours to shade each word if you like.

b	g	b	r	a	n	c	h	w	n	e
a	c	i	c	a	d	a	s	i	y	h
r	e	n	g	r	e	o	o	n	m	a
k	s	a	p	c	g	e	i	g	p	t
b	s	l	a	c	g	k	l	s	h	c
r	i	i	n	c	s	s	k	i	n	h
e	n	r	o	o	t	s	d	o	u	b
o	g	l	m	o	n	t	r	e	e	d
u	n	d	e	r	g	r	o	u	n	d
r	u	m	m	e	r	h	a	t	c	h



There are over 200 species of cicadas in Australia. Imagine you have just found a brand new species. The cicada is black with a bright blue sheen on his wings. Like most cicadas it has two compound eyes and three simple eyes on the top of its head. Draw your cicada and invent a common name for it.

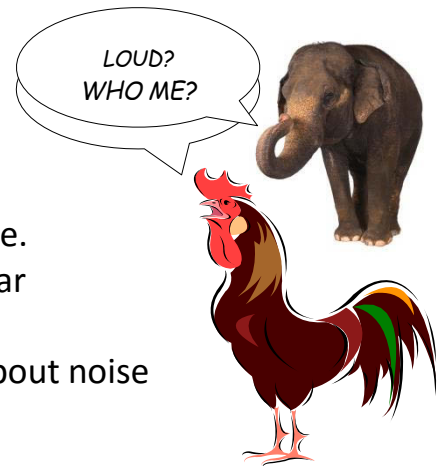
SOUNDS LIKE A JUNGLE OUT THERE

The cicada mating song can be as loud as 120 decibels (Db). It is a mating call but is also said to keep away predators such as birds.

What is a decibel? How is a decibel measured?



- Can you find out, in decibels the loudness of the calls of:
 - other animals, birds, insects?
 - the human voice?
 - a power drill?
 - motor bike?
- Record your findings.
- Make a graph or chart to show how they compare.
- At what noise level are people advised to wear ear protection to prevent hearing loss?
- Make a poster to display what you have learnt about noise levels and protection of hearing.



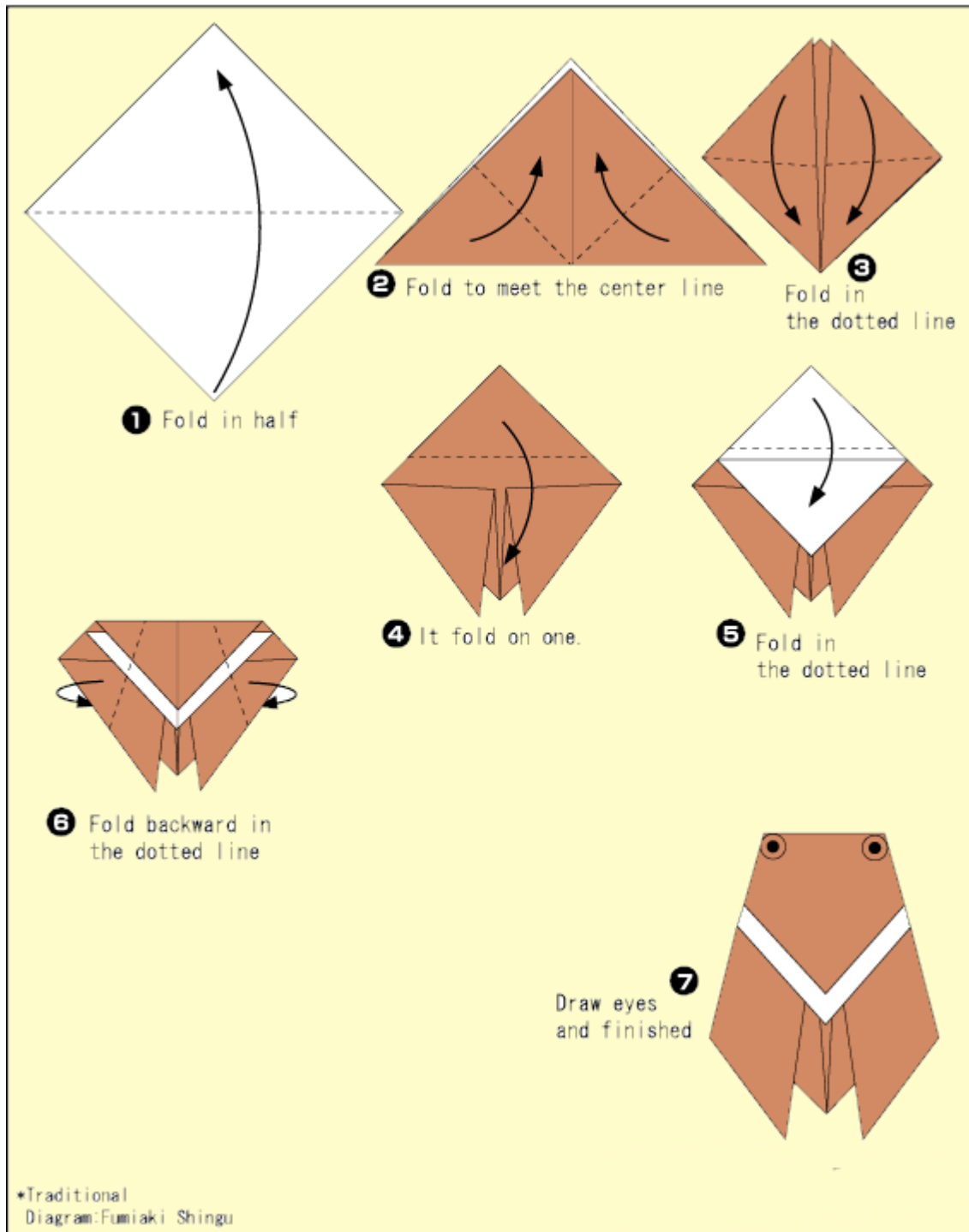
Sounds Extraordinary:

- What can you find out about “The Bloop”, one of the loudest ever recorded sounds?
- Can you discover the names given to five significant unexplained sounds recorded by NOAA (pronounced “Noah” National Oceanic and Atmospheric Administration)?
- The eruption of the Indonesian volcano *Krakatoa* is one of the most violent events in recent and recorded history. Can you find out the maximum known distance from which the Krakatoa explosion was heard?



Record your findings. Perhaps you could record your findings using a microphone.

Origami Cicada



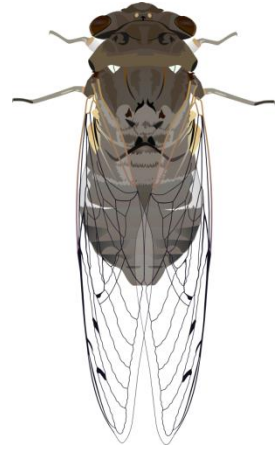


Cicada Calendar

The Life of a Cicada

Can you make a calendar, timeline or perhaps a storyboard to show the different stages and events in the life of a 'Green Grocer' cicada – You will need to think carefully about how to accurately represent the different stages. The nymph stage may last for many years, whereas the adult and egg stages are quite short. Perhaps spend some time researching timelines for other creatures.

See if you can include little diagrams or symbols to indicate when the nymph leaves his old skin or when the nymph leaves a tree root to find a new source of food.



Adult Cicada

Typically the stages are:

1. **Eggs** – After the eggs are laid, it is some weeks before they hatch, probably about six weeks.
2. **Nymph** – sometimes months but often many years below ground. The 'Green Grocer' (common name of one of the suburban varieties of cicada in Australia) may spend 6-7 years underground. This can vary according to conditions.
3. **Cicada adult** - lives for about six weeks



The adult cicada sheds its skin for the last time.

The Green Grocer mating call may be heard throughout the suburbs from early November until late December.