Hetty and the Dragon



Reproducible Activities

to accompany the story of $Hetty\ and\ the\ Dragon$

Activities are of varying difficulty to suit a range of interests and abilities.

Hetty and the Dragon - Life Sized Mural

You will need a friend, scissors, chalk, pencils, a tape measure, and very large sheets of paper (bigger than you!)

If you don't have any large sheets of paper, you could try joining newspaper pages together.

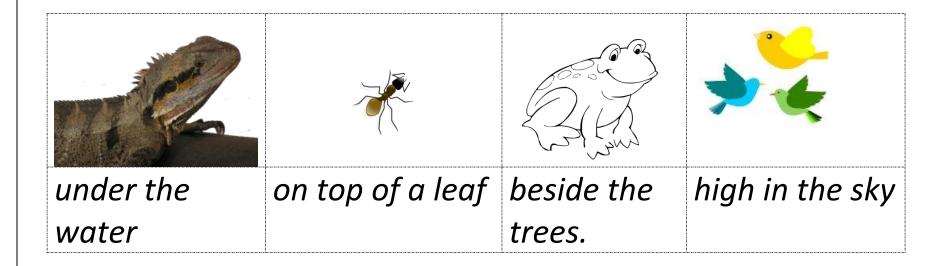
- 1. Lie down on a large piece of paper. Ask a friend to trace the outline of your body onto the paper with a piece of chalk or pencil.
- 2. Measure the length of your body shape on the paper. The girl (monster) in the story *Hetty and the Dragon* was 135 cm tall. Are you taller or shorter?
- 3. On an even larger piece of paper, draw a blue river all the way from the top of the paper to the bottom. Draw a path beside the river.
- 4. Draw a beautiful forest beside the path.
- Go back to the first piece of paper and decorate the shape of yourself so that it looks like you. Cut out the shape. Paste it onto the forest.
- 6. Use another piece of paper. The dragon in the story was 90 cm in length. Draw a dragon 90 cm from the top of his head to the tip of his tail.
- 7. Decorate the dragon. You can make a different kind of dragon if you like maybe a fiery one!
- 8. Cut out the dragon and paste it next to the river.
- 9. Hetty the ant was 1 cm in length. Use a scrap of paper and draw an ant 1 cm in length. Cut out the ant and paste it on the path.

You will need a large piece of paper, pencils, scissors, glue

Where do we belong?

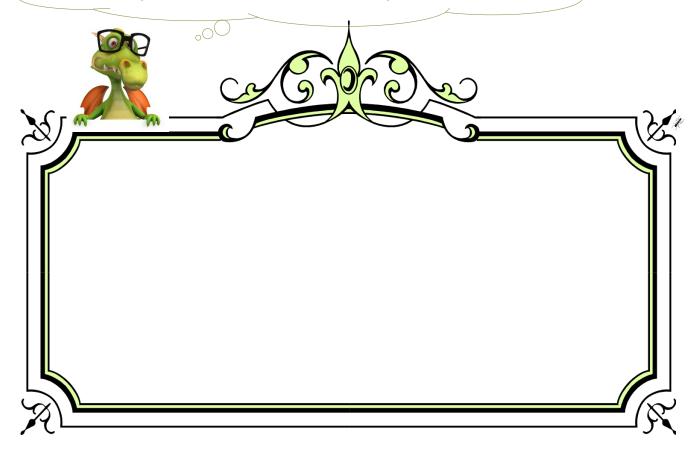
Draw a big pond. Draw three trees beside the pond.

Cut out the pictures and paste them in the right places.





Draw the Eastern Water Dragon in the space below. He has spikes on his back. He has a red splash on his chest.



The dragon has a long tail.

Cut out the words below and paste on top of the matching words in the sentence above.

dragon	The	а	Can you find Hetty
long	tail.	has	the Ant hiding on this page?

EASTERN WATER DRAGON FACT SHEET

Physignathus lesueurii - (Gray, 1831)

Habitat

Eastern Water Dragons live beside the rivers, creeks and billabongs of the eastern coast of Australia. They range from Cooktown in Queensland to Victoria in the south.

Water dragons always live near water. If they sense danger, they may swim to the bottom and lie hidden under the water. They have been known to remain submerged for up to an hour or more. Their heart rate slows and they are able to "breathe" through their skin.

Dragons may even sleep under water with just their nostrils protruding. Water dragons are very good tree climbers and can be seen draped along tree branches overhanging the water.

Size

An adult water dragon may grow up to 90cm from head to tail, although most of this is tail. Males will grow to be larger than females.

Age

The life span of an Eastern Water Dragons is thought to be 20-30 years.

Food

Eastern Water Dragons eat insects, small frogs, yabbies, aquatic life, fruit, berries and flowers.

Behaviour

Can Eastern Water Dragons "talk" to each other?

Yes! Water dragons communicate using movement to establish mating

rituals or pecking orders. Signals include hand waving, head nodding and stomping.

Eastern water dragons are sociable and like to live in groups. One male lives with a number of females and will fight to defend his territory.

Appearance

Eastern water dragons are prehistoric in appearance. Fossil records date from 20 million years age.

Eastern water dragons have a dark stripe extending from ear to eye. A row spines runs from head to tail.

The dragons are well camouflaged, having a greyish green colour on their upper body with cream and black bands.

Males can be distinguished from females by a bright red splash on their chest. This is more pronounced during the breeding season.

The tail is muscular and acts like an oar during swimming. Back legs are strong and powerful with sharp claws for climbing and digging.

Breeding

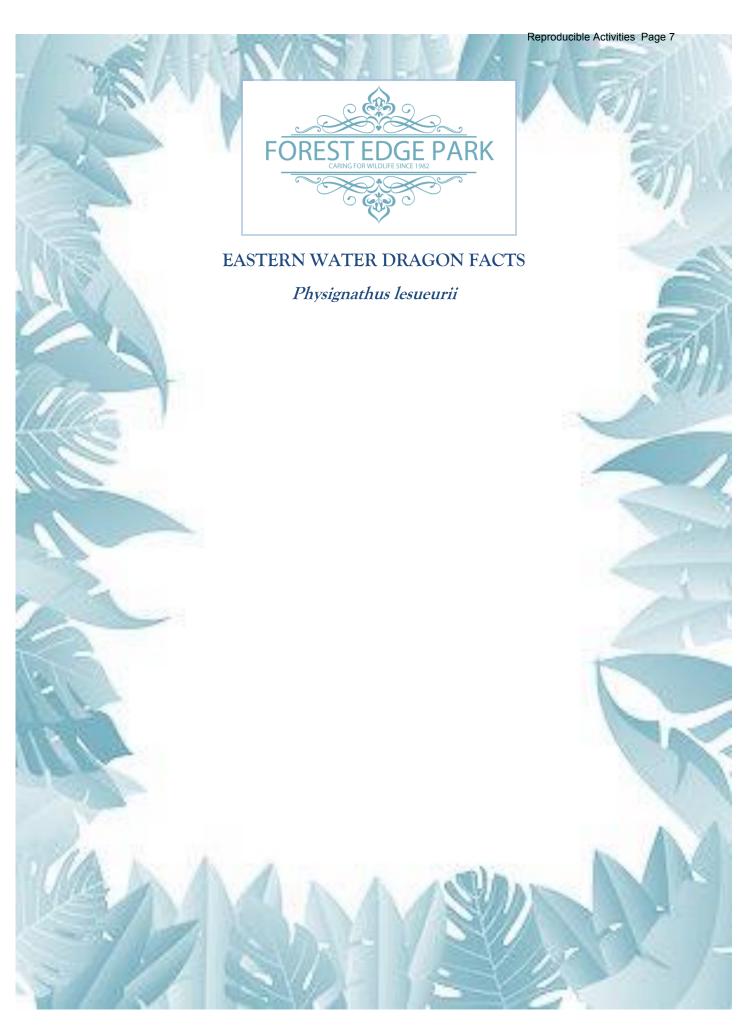
One male dragon presides over a group of females and will fight to defend his territory.

Egg laying takes place between October and December. The egg laying season begins earlier in the warmer areas to the north. Often, two clutches of eggs are laid during the season, one month apart.

Females lay about a dozen eggs in a shallow nest in sandy soil above the waterline. The eggs are covered and left alone to incubate. Hatchlings may take three months to emerge. When hatched, the miniature dragons are able to fend for themselves.

See Challenge Activity to accompany these notes FOREST EDGE PARK NOTES

FOREST EDGE PARK NOTES a challenge to accompany Eastern Water Dragon Facts You are a employed at Forest Edge Park, a wildlife park. One of your tasks is to create a sign to place on the outside of the Eastern Water Dragon enclosure. Things to Consider Point form makes the text easy to read What do you think are the most important points for visitors to know? What do you think are the most important points for ensuring the health and safety of the Eastern Water Dragon? Make a rough draft in the space below. When you are ready, enter the text for the sign on the next page.



Activity C Page **2** of **2** to accompany the story Hetty and the Dragon and the Eastern Water Dragon Fact Sheet

The Eastern Water Dragon Mystery Sentence

Every letter of the alphabet has been given a different number. Most of the letters of the alphabet have been filled in for you on the grid.

Can you work out the missing numbers and complete the mystery sentence?

	a	b	С	d	е	f	g	h	i	j	k		m	n	0	р	q	r	S	t	u	V	W	X	У	Z	
1	8	9	11			24	17		3	22		15	21	n 14	12	1	25			19	20	2		8	7	4	
1	9	<u></u>	6	-	6			19	6	5	14		0 1	- 8 19	6	5		26	5	- 18	1 7	12	<u> </u>	_ 4			

 $\overline{15}$ $\overline{3}$ $\overline{13}$ $\overline{6}$ $\overline{16}$ $\overline{19}$ $\overline{12}$ $\overline{23}$ $\overline{3}$ $\overline{26}$ $\overline{6}$ $\overline{20}$ $\overline{14}$ $\overline{26}$ $\overline{6}$ $\overline{5}$ $\overline{19}$ $\overline{23}$ $\overline{6}$

10 18 19 6 5

Can you find Hetty hiding somewhere?



Golden Tailed Spiny Ant Facts

Golden-tailed Spiny Ant -

Polyrhachis (Hagiomyrma) sp., Polyrhachis ammon Golden-tailed Spiny Ants have a beautiful golden sheen to their abdomen.

How big is a Golden-tailed Spiny Ant?

6-8 mm



Where do Golden-tailed Spiny Ants live?

The Golden-tailed Spiny Ant inhabits the open forest and woodland in coastal eastern Australia from north Queensland to Victoria. They like to nest in the soil under rocks and logs.

What do Golden-tailed Spiny Ants eat?

Golden-tailed Spiny Ants can be found alone, searching for food on plant leaves and tree trunks. They are *omnivorous*. Omnivorous means that they will eat either plant or animal food, just like we do.

Like many other ants, Golden-tailed Spiny Ants enjoy nectar.

Ants will collect *honey dew* from plant sucking insects such as leaf hoppers and scale insects. The insects secrete excess sugary liquid, known as honeydew.

The ants will bump the insect with their antennae and the insect will release a drop of the honeydew.

Golden-tailed Spiny Ants Bite?

If disturbed, Golden-tailed Spiny Ants will normally shy away rather than attack.

How to Make an Ant Farm (adult supervision required)

Ants are hardworking little creatures and very interesting to watch.

You can make an ant farm using objects found around the house.

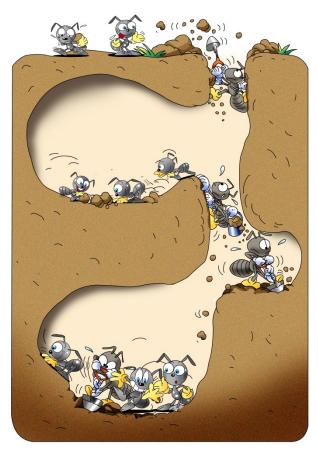


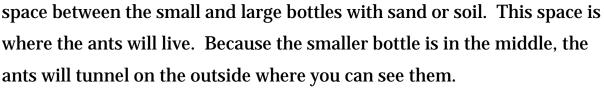
You will need:

- · 2-litre clear plastic bottle
- 1 small plastic bottle with lid or plastic container with lid. This should be small enough to fit inside the 2 litre plastic bottle.
- · Old panty hose
- · Ants
- Sugar water
- Food for ants you will need to research this according to ant type.
 Tiny seeds, dead insects are ant favourites. Yum!
- Scissors (or a knife wielding adult to cut the tops from the bottles)

Method

- 1. Carefully cut the tops off the plastic bottles
- 2. Fill the smaller bottle with sand or lump free soil. You can add some tiny twigs if you like.
- 3. Insert the the smaller bottle inside the large one and carefully fill the





How to Make an Ant Farm (adult supervision required)

Continued from Page 1



without a queen.

Now you are ready to collect the ants.

Ants can bite when disturbed, so it is a good idea **to wear gloves.** Red ants tend to be more aggressive than others.

- 4. Collect the ants carefully and place them into a container. Try to find the queen. She will be larger and will have lots of ants around her and possibly eggs as well. The ants will try to protect her and you may have to hunt for her. Having a queen in your ant farm means that it will last longer. Ants die
 - Although the worker ants are female, they do not lay eggs
- 5. Put your ants into your farm gently. Pop a cotton ball soaked with water (or a sugary water solution) on top of the soil so that the ants have water to drink (this needs to be replaced *every* day).
- **6.** Place a double thickness of nylon panty hose over the top of the farm. Secure with tape, strong elastic or string. You do not want them to escape!
 - Keep your ant farm in a cool dark place and try not to move or disturb it or the tunnels may collapse. Place food sparingly, you do not want the food to go mouldy.
- 7. When you are ready to let your ants go, make sure you put them back in the same place that you found them.

Ant farms are also available commercially from good educational suppliers

This activity may accompany the story of Hetty and the Dragon and related activities.