Dugites are quite common around Perth and are most likely to be seen during the daytime in warmer months. They are one of the native species that have benefited from urbanisation, which has brought with it new food sources and places to shelter. Most snake bites that occur around Perth are from dugites. While they are generally shy, they will attack if they feel threatened. They are listed as the 13th most venomous snake in the world by the Australian Venom Research Unit. Turn to page 3 to find out more about this amazing reptile.
**Limericks**

A limerick is a short poem that is usually fun, silly or even rude. Limericks contain five lines and have the rhyme scheme AABBA. This means that the first, second and fifth lines rhyme (A), and the third and fourth lines rhyme (B). Lines one, two and five will have 7-10 syllables, with lines three and four matching and having 5-7 syllables. The first line often introduces a person using the line “There once was a ...” or “There was a ...”

There once was a schoolgirl from Collie,  
Who had a twin brother called Ollie,  
Whenever it rained,  
Young Ollie complained,  
Until the girl opened her brolly.

<table>
<thead>
<tr>
<th>Introduces person</th>
<th>Syllables</th>
<th>Rhyme</th>
</tr>
</thead>
<tbody>
<tr>
<td>There was a young boy from Wiluna,</td>
<td>5 syllables</td>
<td></td>
</tr>
<tr>
<td>Who rode home from school on a tuna.</td>
<td>7-10 syllables</td>
<td></td>
</tr>
<tr>
<td>His father said, “Mate,</td>
<td>5 syllables</td>
<td></td>
</tr>
<tr>
<td>You’re terribly late,</td>
<td>5 syllables</td>
<td></td>
</tr>
<tr>
<td>I thought that you’d be home much sooner.”</td>
<td>7-10 syllables</td>
<td></td>
</tr>
</tbody>
</table>

**Activity:** Draw a picture to go with the limerick.

**YOUR TURN**

Have some fun writing a limerick of your own.

- Start with your first line:  
  There once was a ____________________________ (7-10 syllables)

- Next, think of two words that rhyme with the last word from your first line. These words will help you find a “story” for your poem. Remember, limericks can be silly so have some fun with your ideas.

- Now, try to write your first draft. Play around with your words and sentences to make them fit the limerick rules.

1. ____________________________ (A) (7-10 syllables)
2. ____________________________ (A) (7-10 syllables)
3. ____________________________ (B) (5-7 syllables)
4. ____________________________ (B) (5-7 syllables)
5. ____________________________ (A) (7-10 syllables)

- Finally, check your limerick has the right number of syllables in each line and follows the AABBA rhyme scheme. Read your limerick aloud to make sure it flows well.

**FRACTION ACTION**

Draw lines to match the fractions below to their equivalent values. Hint — there may be more than one.

<table>
<thead>
<tr>
<th>Fraction</th>
<th>Equivalent Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\frac{15}{100}$</td>
<td>0.15</td>
</tr>
<tr>
<td>$\frac{1}{10}$</td>
<td>0.1</td>
</tr>
<tr>
<td>$\frac{3}{30}$</td>
<td>0.1</td>
</tr>
<tr>
<td>$\frac{15}{60}$</td>
<td>0.25</td>
</tr>
<tr>
<td>$\frac{0.1}{1}$</td>
<td>0.1</td>
</tr>
<tr>
<td>$\frac{100}{1}$</td>
<td>1</td>
</tr>
<tr>
<td>$\frac{1}{4}$</td>
<td>0.25</td>
</tr>
<tr>
<td>$\frac{0.15}{1}$</td>
<td>0.15</td>
</tr>
<tr>
<td>$\frac{0.75}{3}$</td>
<td>0.25</td>
</tr>
<tr>
<td>$\frac{0.4}{4}$</td>
<td>0.1</td>
</tr>
<tr>
<td>$\frac{0.1}{1}$</td>
<td>0.1</td>
</tr>
<tr>
<td>$\frac{0.25}{4}$</td>
<td>0.0625</td>
</tr>
</tbody>
</table>

**EQUATIONS**

Race around the track to help the numbat find a feast of termites. Along the way, colour in all of the blocks that are equivalent to the magic number at the centre.

**Challenge yourself:**
- Try it without a calculator.
- Set a time limit and try to beat it.
- Try finishing quickly by estimating answers to see which are most likely to be right.

**ANSWERS**

The answers to all ED Learn activities are available online: mediaeducation.com.au/students.

**MATHS minds**

**POSTAL ADDRESS** ED! Magazine, The West Australian, GPO Box 2998, Perth WA 6800
**Dugite**

**FAST FACTS**

- **Scientific Name:** Pseudonaja affinis
- **Conservation Status:** Vulnerable
- **Body Length:** up to 2 m
- **Weight:** up to 1.5 kg
- **Incubation:** 65–90 days
- **Number of eggs:** 10
- **Habitat:** All habitats
- **Distribution:** Southern Western Australia

**DESCRIPTION**

Dugites are venomous snakes. They vary in colour from grey to olive to brown on the top of their bodies, with an olive or yellowish belly. Black scales can be scattered over the body and the head can be paler or darker than the rest of the body. Young dugites have black heads.

**DIET**

Dugites are carnivores. Before European settlement they mostly ate other reptiles such as lizards and snakes. Since then they have adapted well to eating mice and rats. Dugites can sometimes swallow other snakes almost as big as themselves.

**IN THE WILD**

They may be found sheltering beneath logs or rocks or living in abandoned burrows or hollow logs. When disturbed, dugites are very shy and will often slither away, however, they will defend themselves if cornered.

**THREATS**

The main natural predators of dugites are birds of prey and monitor lizards. Introduced animals such as cats and dogs also attack dugites.

**AT PERTH ZOO**

Perth Zoo has a male dugite in the Australian Reptile Encounter.

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**ACTIVITIES**

1. **Fact finding**
   Highlight, underline or circle five facts on this page that you didn’t know before. List them here, from the most to least amazing.
   1. ___________________________________________________
   2. ___________________________________________________
   3. ___________________________________________________
   4. ___________________________________________________
   5. ___________________________________________________

2. **Scaly mates**
   Dugites are reptiles. Circle the other animals below that are also reptiles. (Hint: reptiles have scales covering their bodies.)
   - Bobtail
   - Macaw
   - Lion
   - Tortoise
   - Tiger
   - Crocodile
   - Fish
   - Perentie
   - Motorbike
   - Frog
   - Blue-tongue lizard
   - Elephant
   - Python

3. **A rainbow snake**
   Dugites have brown scales but this snake has a colourful pattern — can you complete the scaly pattern all the way to its tail?

4. **Reptile**
   Circle the facts about dugites that will make each sentence true.
   - Dugites: • are more likely to be active during the a) day b) night.
     • usually lay about a) 1 b) 10 c) 100 eggs.
     • become more active after lying a) in the sun b) under water c) underground.

**DID YOU KNOW?**

The Rottnest Island dugite is smaller and genetically different from those found on the mainland.

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**Images:** Perth Zoo

For more information about Perth Zoo and its animals, visit perthzoo.wa.gov.au.
Decay? No way!

Our baby teeth start growing when we are about six months old. Around the age of five, one by one, our baby teeth fall out and get replaced by our adult teeth. Our adult teeth, all 32 of them, are made extremely tough so they can last a lifetime.

However, certain foods and drinks can cause our teeth to decay. This can mean painful toothaches, cavities, and even dental surgery. Yikes! Have you had any tooth cavities filled? Do you know what foods and drinks might lead to tooth decay?

**MODELLING TOOTH DECAY**

In this experiment, you will explore how different liquids affect the rate of tooth decay.

**What you need:**
- 6 glasses, mason jars or clear-plastic cups
- 6 hard-boiled eggs — shell on (ask an adult to help you hard-boil the eggs before you begin)
- Fluoride toothpaste
- Liquids (you may like to test other liquids if you have enough eggs):
  - tap water
  - milk
  - soft drink e.g. cola or lemonade
  - fruit juice
  - vinegar

**Getting started**

1. Take one egg and cover it in fluoride toothpaste. Leave it to soak for at least 24 hours.
2. Gently wash off the toothpaste.
3. Label five of your glasses with the names of the liquids you will use i.e. tap water, milk, soft drink, etc.
4. Carefully place one egg in each glass (keeping the toothpaste-soaked egg separate).
5. Fill each glass with the different liquids. Make sure the egg is fully covered. Try to add the same amount of liquid to each glass.
6. Take the sixth glass and place the toothpaste-soaked egg inside. Cover it with soft drink and label it. Place it with the other glasses.
7. Place your glasses in a row, somewhere safe where they won’t get knocked over.

**Take the challenge**

- Make a prediction about what the results might be. What will happen to the shell? Will you see a different result in each glass?
- After 24 hours, carefully remove your eggs from their glasses using a pair of tongs. Place all eggs on a clean surface to examine them. Record your observations.

**Analyse your results**

- Write down a few sentences describing the results of your experiment. What did you observe? What happened to the eggs? Did the different liquids create different results? Why do you think you got these results?
- Now make some conclusions about your experiment. Use the questions below to help you:
  - Did the results come out as you predicted?
  - Can you explain what happened in your experiment? Why did the liquids affect the eggs in different ways? Was there anything unexpected?
  - Did anything go wrong with your experiment? How might you improve your experiment next time?
  - What do the results mean to you? Will you change anything about your tooth care or diet because of this experiment?
  - Share your results with your friends and family. Your parents or carer might even like to share photos from your experiment and journal to social media using #ScitechAtHome.

**Why do we use eggs in this experiment?**

Well, we didn’t “eggspect” you to have six teeth lying around! Egg shells have a similar chemical structure to the enamel in our teeth. We can substitute teeth with eggs to model the effect of different liquids on our teeth.

**Use the news**

**Readership**

Newspaper stories are written and selected by the editorial department. The stories selected must be of interest to the readers. Inside The West Australian there is a mixture of local, state, national and world news. However, because the audience is the people of WA, there is a focus on news about WA. This is the same with any newspaper — the stories must matter to their readers.

Because The West Australian includes a mixture of news types, there will be stories that would not look out of place in a community newspaper, or a national newspaper. Look through today’s paper and find two examples for each.