



## A G.A.T.E.WAYS JOURNEYS PROGRAM

For Year 1 and 2 children with a love of learning

### 'Subterranean Secrets'

**G.A.T.E.WAYS** is an independent organisation offering challenging and enriching activities and experiences to develop and extend highly able children. This *JOURNEY* for both girls and boys will run over four sessions.

Listen, listen –drip, drip  
 Careful, careful –don't slip.  
 Long and narrow, high and wide -  
 Wonder what we'll find inside?  
 Rustle, rustle, Hark! Hark!  
 Strange sounds in the dark.  
 Sniff, sniff –musty smell.  
 Ancient creatures here did dwell.

Echo-echo everywhere.  
 Can't see, what's there!  
 Flitting, flapping squeaking things  
 Fly above on outstretched wings.  
 Glimmer-glowing tiny spark -  
 Luminescence in the dark.  
 Lava, acids, ice and waves  
 Long ago, created .... caves!

**Requirements:** In addition to boundless enthusiasm and curiosity, students should come prepared each week with morning tea (no nuts please), a plastic-pocket folder; coloured / grey-lead pencils, capsule pencil sharpener; eraser; scissors and glue stick. They should not bring Textas, Connectors or other felt, gel or ink pens. Workbooks / worksheets will be provided, as will most construction materials. For Session One, please also provide a small, **recent**, named student photograph and a stamped, self-addressed DL envelope for your report. Put your name/year/and program title on the back of the envelope.

#### **Session One: .....in which we discover lots of very different types of caves!**

What exactly *is* a cave? What's the difference between a hole in the ground, a mine, a tunnel, and a cave? Are there different types of caves? How are they made? What is a **lava tube**? What is **karst**? Why is **limestone** so important? What are **speleothems**? How are **stalagmites** and **stalactites** created? **Spelunker** and **speleologist** are strange words – what do they mean? What interesting, important caves are there in Australia? Have you visited any?

**Activity:** *'Visit' four different types of caves, then construct a model of one of them.*

#### **Session Two: .....in which we meet Trog and his amazing extended family!**

Trog is normally an extremely shy creature who much prefers to remain in the shadows and out of the limelight! For us however, he's made a special effort, and we are invited on a very special tour to meet his relatives. First we meet his most distant cousins, the Trogloxenes. You'll recognize quite a few of these creatures. Then it's off to meet some closer cousins, the Troglophiles, and finally his immediate family, the Troglobites. Be warned, they're a **very** strange lot!

**Activity:** *Create a special 'cave gallery' to display some of Trog's relatives.*

#### **Session Three: .....fluttering, flittering, glittering, glowing things that DON'T go bump in the night!**

Meet Belinda and Lucinda, the 'Cave Incredibles'! Each of their families has developed amazing super-powers that allow them to live most of their lives in the dark. Belinda's family possesses an ultra-sophisticated navigation system which enables them to travel long distances at night, yet return safe and sound to their cave roosts before dawn! Lucinda's family has the ability to create glittering, glowing cascades of fairy lights! How **do** they **do** that? Let's find out!

**Activity:** *Create a glow-worm cave!*

#### **Session Four: Caves? Who cares?**

Geologists, hydrologists, speleologists, paleontologists, vulcanologists, archaeologists, anthropologists, biologists, glaciologists - these are just a few of the 'ologists', or scientists, that find caves to be fascinating treasure chests of information on our planet's past, present and future. In our final session, we'll take an exhilarating journey with several of them to observe **what** they do; **how** they do it and hopefully, understand a lot more about **why** they do it.

**Activity:** *Sue's Mystery Cave Excursion! (when you won't actually have to go anywhere!)*

#### **Homework and Reporting.**

Children will be encouraged to finish models and other construction work at home, ready for display the following week. In addition, some simple research (internet, school or local library) may be requested.

**Sue Sturges** is a Primary and Secondary teacher with a BA in Recreation, Planning and Management. She is continually motivated by students' enthusiastic responses to her innovative programs. Sue has a particular passion for orienteering and navigation but, in addition to presenting programs in these areas, has run many successful workshops in the areas of social history, geography, photography and leadership.