



**G.A.T.E.WAYS**

**invites Year 1 and 2 children with a**

**love of science and art to**

***' Hungry As...'***

G.A.T.E.WAYS is an independent organization 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.

"I'm so hungry I could eat a ..." A what, exactly? A stinging jellyfish? Poisonous leaves? How about a dead whale? What would you eat to stay alive? How do cows get any goodness out of dry grass, and why do rabbits eat their own poo? Why do, in fact, lots of animals eat poo – and not just their own? What do ladybugs and orcas have in common, why would cats starve on a dog's diet, and why is being a shark with lots of brothers and sisters pure murder? Join us for a culinary rollercoaster through the bizarre world of heterotrophs – basically, anything that eats something else.

In this Journey, we will dive into our stomach – and oesophagus, intestines, and even further! We will also investigate a different group of consumers each week, focussing on some of the more unusual or unexpected members of each group. We will draw annotated figures of some of the creatures, so the creation of accurate artwork will be one feature of the Journey. Primarily we will be investigating, comparing, and contrasting the digestive systems and extraordinary range of eating habits of nature's consumers. We will also look into that sometimes controversial question – in which group do we belong?

### **Session 1 Down the Hatch**

We begin our Journey by looking at the basics of digestion, using a familiar animal – ourselves. We investigate what happens to that apple after we've bitten off a chunk, and follow its surprisingly long journey through our body, making our own real-life-size (and that's really big!) model of our own guts. We then look at our first group – the herbivores - and learn about the extraordinary lengths (literally) they go to so that they can digest those most indigestible of foods – grass and leaves. Is there really such a thing as a pure vegetarian?

### **Session 2 Tooth and claw and ... proboscis?**

Everyone loves a carnivore – the mighty tiger, the terrifying shark, the swooping eagle. Of course, we won't be looking at any of them. We'll be looking at the unexpected carnivores, the tiny, the beautiful, the funny, the ones that we never think of as their true selves – killers! We will then compare a carnivore's guts with a herbivore's, with more life-size models, which turn out to be even bigger than ours!

### **Session 3 Disgustivores**

Yes, I made that up, but it does describe very nicely a mix of consumers whose habits really do make you go "Eeyoo!" From living off bacteria poo, to living off your brothers and sisters, animals will eat almost anything to survive. We will sort out the feeders from the food in a very odd list, and discover why we are glad we aren't sharks. Can you match each animal with its food?

## Session 4 The Power of Poo

Every organism does it – if something goes in, something else must come out. And it turns out that poo makes the world go round. From beetles to rabbits and koalas, it seems that almost everyone likes to eat it! We'll meet a VIB – a very important bird – who's poo keeps the rainforest alive, and finish by seeing just how much of the last four weeks we can remember. What was *your* weirdest fact?

### Homework requirements

Students will be required to complete a homework assignment given out at the end of each session. The homework **MUST** be hand drawn and hand written (no printouts!) It is most important that students are encouraged and assisted, if need be, to complete this part of the program.

### Session Requirements

Students will be required to bring a lead pencil (and a few coloured pencils if they desire), an eraser, sharpener, and a sketch pad of about A4 size. The pad does not need to be expensive cartridge paper, but does need to be unlined. Note: NO textas, and no clip-together pens, please – they are very distracting!

### About the presenter

Andrew Plant is a professional artist and trained zoologist. He has written or illustrated over 100 science books for Australian and international publishers, and has a passion for the animal life of this planet. He has studied and illustrated wildlife – and the things they eat – while travelling in East Africa and the Asia-Pacific, scuba-diving on the Great Barrier Reef, and trekking through the Andes and the Himalayas – always with a camera or sketch book in hand.

