



G.A.T.E.WAYS invites
gifted Year 5 and 6 children with
a love of science and art to
'Predator!'

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. The predatory animals of the earth are as varied as the environments they live in and the prey they hunt. From microscopically small to staggeringly huge, they prowl the deepest oceans to the highest mountains, seeking their prey. They have evolved an enormous variety of weapons and strategies to help them capture, overcome, kill, and eat their food. Stealth, patience, speed, ferocity, deception and poison are all used by different animals in the hunt for prey – in fact, there is one predator that uses all of them!

Requirements: Bring lead and coloured pencils, erasers and any other writing and drawing materials they might like to use, and an A3 sketch pad and/or note books. Bring a small photograph to the 1st session and a stamped, self-addressed DL envelope.

The hunting animals of our earth have always had a fascination for humans. The reason is obvious – these animals are killers, whatever their prey. Speed, strength, teeth and claws, are a bit scary but also exciting! What most people forget, however, is that most predators are not large and certainly are no threat to us. Many don't have fangs and talons - in fact many are quite 'peaceful' animals by our standards. Some are our closest friends!

Each session we study four groups of predators, with the animals in each group all having something in common. It isn't always obvious what it is that they share – what do barnacles and flamingos have in common, for instance? We will act like real zoologists, studying these animals in a scientific way, working out not only what they do, but why they do it!

A major focus in this Journey is art – we will draw some of the animals we study, so we can better understand what features they have that make them hunters. Our drawings will need to be scientifically accurate and precise, but we will also learn how to make them as beautiful as we can, studying the use of shading and texture in art.

Session 1 Big, Bad and Toothy

We begin our Journey by looking at the prehistory of predators – when did animals first start to eat other animals? What are the earliest known predators, and what do we know about how they hunted and what they ate? They include some of the most bizarre, nightmarish animals to ever exist on earth – you will have trouble believing they were actually real! We then look at three famous prehistoric predators, each very different from the other, but all of them big, bad and toothy! In their environments, they were the top predators, the most feared creatures of their time. Lucky for us, they're extinct!

Session 2 Unexpected Traps

This session, we first look at the predators that hunt without any teeth at all, but net themselves their food! We follow them with the trappers; predators that hunt with ingenious features that allow them to spring unexpected traps on their prey. From some of the largest animals to ever live that travel thousands of kilometres around the world, to tiny hunters that live glued to the one spot all their adult lives, and blind, deaf and toothless wanderers that have no brain but can kill a human, we investigate their bizarre worlds.

Session 3 Perfect Adaptations

Some predators have evolved some very impressive weapons in order to overcome their prey, or to get their prey out of their hiding places. We look at some of these peculiar weapons that act like poison darts, or stun guns, or jack hammers, and learn how they are perfectly adapted to hunt certain prey. Then we turn to those predators that have become specialised to eat only one particular type of food – in some cases, only one particular animal! How does such a diet change the entire look of a hunter? Why would any animal do such a thing?

Session 4 Sneaky and Nasty!

We start our final session trying to find those predators that hunt by concealment, by disappearing, or pretending to be something else. Sneaky, tricky and quiet, we'll discover how an innocent looking leaf or twig or stone can spring to life and trap the unwary! We then end our program by facing the super-predators, the top of the food chain, the animals that eat, well, whatever they want! These animals not only pose a threat to the other creatures in their environments, but even to humans – enter their worlds at your own risk!

Homework requirements:

Students will be required to complete a homework assignment given out at the end of Day 1. The homework **MUST** be hand drawn and hand written (no printouts!) and presented on A3 size paper for assessment, and will be returned with the student's report. It is most important that students are encouraged and assisted, if need be, to complete this part of the program.

About the Presenter

Andrew Plant is a professional artist and trained zoologist who has been teaching at the Monash Science Centre, at schools, and at libraries, for eleven years. He has written or illustrated over 120 science books for Australian and international publishers, and travelled through Australia, Asia, Africa, Europe and South America wildlife watching, photographing and drawing. © G.A.T.E.WAYS