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INTRODUCTION

Anyone can be an inventor. All it takes is desire and the effort to master a few basic skills, such as observing and experimenting.

Most people are inventors without even knowing it. Finding a new way to play an old game is an invention. So is taking a different way to school or rigging up a gadget to make a chore easier. A story with an unexpected twist is a kind of invention. So is a tune never heard before or a new recipe for pancakes.

This book aims to help inventors strengthen their natural creativity. It presents tips and secrets that successful inventors know, for example, that it's possible to learn as much from a failure as from a success.

The book has six parts:

- **Learn the Basics** covers what inventing is all about.
- **Sharpen your Skills** shows how to practise drawing, researching, brainstorming and other activities which make invention possible.
- **Get Ideas** explains a variety of ways for thinking up inventions, including people watching, recycling and borrowing from nature.

- **Invent for Real** gives tips for creating gadgets, methods, toys, games, characters and designs.
- **Share Your Ideas** deals with patenting and bringing your inventions to the public.
- **Resources** offers a bibliography, a website address list and – for the teacher – whole-class projects such as making an invention timeline.

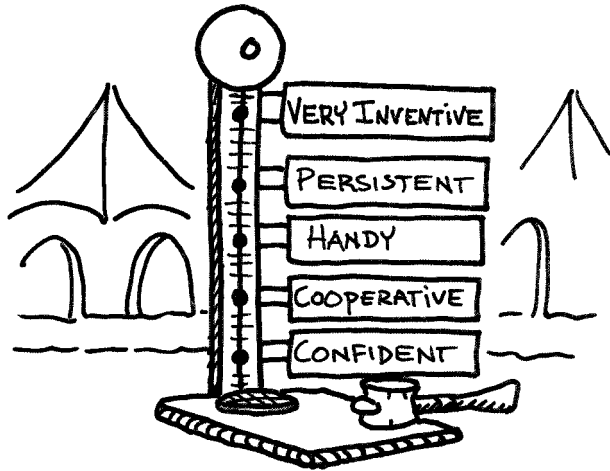
Stories about inventions fill the pages, from David Warren's 'black box' to Graeme Clark's bionic ear. The Wright brothers are mentioned often because their approach is a model for independent inventing. While we might not all be as successful as the inventors honoured here, we can learn from them and amaze ourselves with our own creativity.

Important Safety Note!

Inventors deal with the unknown. What we don't know **can** hurt us. The best inventors take care to avoid injuring themselves or others. When in doubt, stop and ask an expert.

BE INVENTIVE

Inventors come from both rich and poor families. They live in every part of the world. Some are highly educated. Others have spent little time in school. Despite these differences, inventors share many of the following qualities.



Try this: Check if you have inventive qualities. Add more if you like.

**I'M LIKE THIS
ALREADY**

**I WANT TO BE
MORE LIKE THIS**

Confident: I believe in my ideas even if other people think they're silly.

Cooperative: I'm good at teamwork.

Curious: I'm interested in figuring out why things work or don't work.

Handy: I like to make or fix things and enjoy learning to use hammers, saws, computers and other tools.

Imaginative: I like to think up ideas.

Observant: I notice details that other people might overlook.

Persistent: I work until a job is done

Bonus: Contact an inventor by letter or phone. Ask the person to describe their qualities.

LEARN FROM ANIMALS

No animal has ever had a patent. Still, animals 'invented' all sorts of things before humans came up with the same ideas. Examples include jet propulsion (squid) and dam building (beavers).

Try this: Write a report that compares an animal 'invention' with its human counterpart. You might cover the following points:

- how the animal invention is like the human invention
- how the animal invention is different from the human invention
- the advantages of the animal invention
- the advantages of the human invention.



Bonus: Choose an animal. Carefully study its behaviour either by observing it first-hand or by reading about it or watching videos. See if the animal gives you an idea for an invention.

Animal 'Inventions'

air conditioning:	bee
basket weaving:	bird
body language:	bee
bridge building:	spider
camouflage:	moth
caravan:	snail, crab
chemical warfare:	skunk
division of labour:	ant, bee
drinking straw:	mosquito
fancy outfit:	peacock
farming:	ant
flight:	bat, bird
flipper:	dolphin
float:	jellyfish
glue:	spider
grooming:	chimpanzee
paper making:	wasp
pins:	echidna
poison:	snake
shower:	elephant
slavery:	ant
sonar:	bat
suction cup:	fly, octopus
teamwork:	lion, wolf
trapping:	spider
tunnelling:	mole
v-formation:	geese
war:	ant

A STIRRING AND EATING TOOL

BACKGROUND

This invention is a cooking and eating device. Its main use relates to liquid and soft drinks. Stirring and eating with fingers can be messy and even painful if the food is hot. My invention solves these problems.

SUMMARY OF THE INVENTION

The stirring and eating tool does the same work that the hand does when it takes a cup-like shape. Unlike the hand, which is covered with delicate skin, the stirring and eating tool is made of materials not easily harmed by heat. It can also be made in many sizes.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a view from above.

Figure 2 is a view of the tool used for stirring.

Figure 3 is a view of the tool used for eating.



DETAILED DESCRIPTION

The tool consists of a handle (Figure 1A) and a bowl (Figure 1B). It can be made of wood, metal or plastic. The bowl can be shallow if the main purpose is stirring (Figure 2). Or it can be made deep for eating (Figure 3). The size of the handle and the bowl can vary. For example, a long handle might be best for stirring liquids in deep pots. A shorter handle would be easier to use for eating soups, cereals and so on. A version of the device with holes or slots in the bowl could be used for separating objects (for example, meat balls) from liquids.

CLAIMS

I claim a stirring and eating tool which resembles the cupped hand but which is made from more durable materials.

I also claim a straining tool which resembles the cupped hand with fingers slightly separated.