Teaching science through stories

Children’s stories provide a great context for learning science. Explore our resource packages based around popular children’s books and discover the science hidden in a book. Resources include book summaries, hints and tips for teaching the science and further stories on a similar theme.

They are organised into three age groups:

5 -7 years

* [HANDA'S SURPRISE](https://www.stem.org.uk/elibrary/list/364921/handas-surprise-eileen-brown)



Handa's Surprise would make a great starting point about the needs of living things linked to diet and the specific needs of humans.   
  
NEEDS OF LIVINGS THINGS, DIETS AND ANIMALS

* [JACK AND THE BEANSTALK](https://www.stem.org.uk/elibrary/list/312359/jack-and-beanstalk)



The story of Jack and the Beanstalk  makes a great starting point for teaching the topic of plants yo younger primary aged children.

PLANTS

* [LITTLE RED RIDING HOOD](https://www.stem.org.uk/lxbhry)

[](https://www.stem.org.uk/lxbhry)

As Little Red Riding Hood is set in a wood, it makes a lovely starting point for finding out about habitats.

HABITATS AND FOOD CHAINS

* [ONCE THERE WERE GIANTS](https://www.stem.org.uk/elibrary/list/364917/once-there-were-giants-martin-waddell-and-penny-dale)



Support children to understand that all animals, including humans, have offspring which grow into adults.  
  
ANIMALS INCLUDING HUMANS AND LIFECYCLES

* [ONE YEAR WITH KIPPER](https://www.stem.org.uk/elibrary/list/312379/one-year-kipper-seasons-weather)



One Year with Kipper provides a nice link into work on Seasonal Change as children work to observe changes across the four seasons.

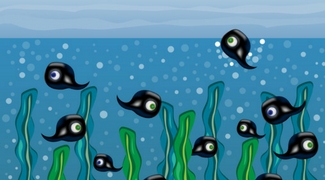
SEASONS AND WEATHER

* [RSPB: MY FIRST BOOK OF GARDEN BIRDS](https://www.stem.org.uk/elibrary/list/312717/rspb-my-first-book-garden-birds-identifying-and-naming-animals)



My First Book of Garden Birds helps to meet the objective to ​identify and name a variety of common  birds.

* [​](https://www.stem.org.uk/elibrary/list/312717/rspb-my-first-book-garden-birds-identifying-and-naming-animals)[TADPOLE'S PROMISE](https://www.stem.org.uk/elibrary/list/312674/tadpoles-promise-jeanne-willis-and-tony-ross)



Tadpole's Promise is a great story to use when exploring life cycles and helping children to describe the difference in the life cycle of a mammal, an amphibian, an insect and a bird.   
  
LIFECYCLES

* [THE GRUFFALO](https://www.stem.org.uk/lxbofb)



The Gruffalo can support children to learn more about habitats and  to identify and name a variety of plants and animals in different habitats, including micro-habitats.  
  
IDENTIFYING AND NAMING ANIMALS

* [THE THREE LITTLE PIGS](https://www.stem.org.uk/lxbjx4)

[](https://www.stem.org.uk/lxbjx4)

Help children to think about identifying different materials and considering what properties they have and how this suits them for different purposes.  
  
MATERIALS AND THEIR USES

7 - 9 years

* [CHARLIE AND THE CHOCOLATE FACTORY](https://www.stem.org.uk/elibrary/list/357458/charlie-and-chocolate-factory-states-matter7-9)



Charlie and the Chocolate Factory by Roald Dahl provides a good context to learn about states of matter.  
  
  
STATES OF MATTER

* [HORRID HENRY ROCKS](https://www.stem.org.uk/elibrary/list/352265/horrid-henry-rocks-sound7-9)



Horrid Henry Rocks is a great book to start teaching about sound and exploring how sounds are made.  
  
SOUND

* [THE FIREWORK-MAKER'S DAUGHTER](https://www.stem.org.uk/elibrary/list/354488/firework-makers-daughter-light7-9)



The Firework Maker’s Daughter by Philip Pullman is a good starting point for teaching about light.  
  
  
LIGHT

* [THE IRON MAN](https://www.stem.org.uk/elibrary/list/360107/iron-man-forces-magnetism)



The Iron Man is the perfect story to explain how magnets attract or repel each other and attract some material and not others.

FORCES AND MAGNETISM

* [THE LITTLE MOLE WHO KNEW IT WAS NONE OF HIS BUSINESS](https://www.stem.org.uk/elibrary/list/357454/little-mole-who-knew-it-was-none-his-business-digestion)



This funny tale creates a great setting through which children can explore simple functions of the basic parts of the digestive system in humans.

DIGESTION

* [THE PEBBLE IN MY POCKET](https://www.stem.org.uk/elibrary/list/351916/pebble-my-pocket-rocks-and-soils)



Pebble In My Pocket tells the dynamic story of rock formation; showing  the reader the processes that the pebble goes through from its beginnings in a fiery volcano 480 million years ago.  
  
ROCKS AND SOILS

* [THE STORY OF FROG BELLY RAT BONE](https://www.stem.org.uk/elibrary/list/354742/story-frog-belly-rat-bone-plants-7-9)



The story of Frog Belly Rat Bone provides a good setting for investigating plants and their benefits to our environment.  
  
PLANTS

[THE VANISHING RAINFOREST](https://www.stem.org.uk/elibrary/list/354529/vanishing-rainforest-human-impact-environment7-9)



The Vanishing Rainforest by Richard Platt is  a good book for looking at the human impact on the environment, in particular deforestation.  
  
HUMAN IMPACT ON THE ENVIRONMENT

* [WOLVES](https://www.stem.org.uk/elibrary/list/354545/wolves-foodchains)



Wolves is a brilliant setting for constructing and interpreting a variety of food chains, as well as identifying producers, predators and prey.  
  
FOODCHAINS

9-11 years

* [BEETLE BOY](https://www.stem.org.uk/elibrary/list/399846/beetle-boy-classification)



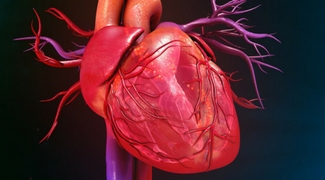
Beetle Boy provides a nice way to link to work on classification of invertebrates.  
  
CLASSIFICATION

* [CHARLOTTE'S WEB](https://www.stem.org.uk/elibrary/list/341287/charlottes-web-lifecycles)



This is the perfect story to compare the lifecycles of different animals and plants.  
  
LIFECYCLES

* [PIG HEART BOY](https://www.stem.org.uk/elibrary/list/399205/pig-heart-boy-circulation)



Pig Heart Boy provides a good setting for learning about the heart and circulation.  
  
CIRCULATION

* [GEORGE'S SECRET KEY TO THE UNIVERSE](https://www.stem.org.uk/elibrary/list/341356/georges-secret-key-universe-solar-system)

[](https://www.stem.org.uk/elibrary/list/341356/georges-secret-key-universe-solar-system)

Geroge's Secret Key to the Universe is a fun read and contains lots of factual sections for help with teaching about the solar system.

SOLAR SYSTEMS

* [GOODNIGHT MR TOM](https://www.stem.org.uk/elibrary/list/354517/goodnight-mister-tom-electricity)



This wartime story is ideal for exploring the uses of electricity and how circuits work.  
  
  
ELECTRICITY

* [ITCH](https://www.stem.org.uk/elibrary/list/357468/itch-changing-state-9-11)



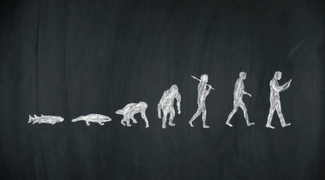
Itch is an action-backed story in which is great for finding out more about changes of state.  
  
  
CHANGES OF STATE

* [KENSUKE'S KINGDOM](https://www.stem.org.uk/elibrary/list/341333/kensukes-kingdom-properties-materials)



Kensuke’s Kingdom is full of opportunities to explore properties of materials, you can even use the context of survival scenarios linked to the book.  
  
PROPERTIES OF MATERIALS

* [ONE SMART FISH](https://www.stem.org.uk/elibrary/list/341323/one-smart-fish-evolution-inheritance)

[](https://www.stem.org.uk/elibrary/list/341323/one-smart-fish-evolution-inheritance)

One Smart Fish by Christopher Wormell provides a meaningful context for learning about adaptations and evolution.  
  
  
EVOLUTION AND INHERITANCE

* [THE TIN SNAIL](https://www.stem.org.uk/elibrary/list/354741/tin-snail-forces-engineering9-11)

[](https://www.stem.org.uk/elibrary/list/354741/tin-snail-forces-engineering9-11)

The Tin Snail by Cameron McAllister provides a context for learning about forces and mechanisms, including levers, pulleys and gears.  
  
  
FORCES AND ENGINEERING