



Science Reading Challenge Activities

The intention of the Science Reading Challenge is not that the children read a large number of books and it is not that they engage in a large number of activities. Better that the children are encouraged to engage with a few science books and one or two exciting activities than that they are required to read 8 books, and many find it difficult to do so.

Important point to note: Science practical work will require risk assessments to be undertaken in advance. School policy and practice will relate to ICT-related activities including video production.

Fascinating Fact Finders / Interesting Ideas Investigators

Pupils are challenged to identify and share the 'fascinating facts' and/or 'interesting ideas' that most caught their attention during their reading. Children should be given the opportunity to talk about the 'fascinating facts'. Ask them questions such as:

- Why did you choose that fact?
- Does it remind you of anything else you have learned about in science?
- What did you feel when you learned that fact?
- Did any questions jump into your mind when reading this book?



Avoid giving the children the impression that science is simply a collection of facts. Rather we need to emphasise that scientists aim to EXPLAIN these facts.

Children can share their fascinating facts in many creative ways:

- Design a large **poster** entitled "Class XX impresses Einstein" on which children can collectively stick their facts.
- Hold a **Teacher vs Pupil science quiz** when the children have created question/answer cards after reading their science books.
- Provide children with '**Ask me a fact about ...**' stickers. A child who has been reading a book about the environment could wear a sticker saying, 'Ask me about recycling'.
- Design 'Fascinating Fact' **bookmarks**
- Design '**lift the flap**' poster or booklet, where fact is posed as a question and the answer can be found by lifting the flap

Science Quizzes and Games

Children could participate in, or design themselves:

- science book-related **quizzes** or **word searches**
- a **board game** relating to a science book
- an '**information treasure hunt**' based on a number of science books in the class (or school) library
- a '**Can you find?**' **competition**. Parts of images from a number of science books are displayed around the school. Children are challenged to identify the books



Science Practical Activities, Experiments and Investigations

Children could:

- Carry out practical activities taken directly from science books
- Be videoed carrying out practical activities linked to their books. These are uploaded to an appropriate platform, so they can be viewed by children reading the same book
- Older children could 'practise' carrying out experiments which they then demonstrate to younger children
- Show their parents how to carry out an investigation at home from a list of carefully chosen sample experiments
- Plan their own investigations
- Propose questions relating to a science book and identify those which they themselves could investigate practically
- Read a biography of a scientist and present a brief report which answers questions such as, 'What did I discover/invent?' 'What did I do?', 'Why do you think this scientist important?'
- Prepare a role-play to describe the work of a scientist. This presentation can be made to classmates or other classes.

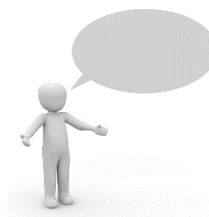


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Communicating the science learned to others

Children could communicate the science they have learned:

- orally through discussion in pairs, small groups or the whole class
- orally through podcasts and videos
- orally through drama and role-plays
- in writing through posters and PowerPoints
- in writing through composing poems or preparing scripts for plays or role- plays
- through artwork such as book marks and book-covers (remember to include the blurb!)
- through artwork such as story boards, cartoons and comic strips
- through craftwork such as board games, models and dioramas
- through paper engineering - designing lift-the-flaps, pull-outs and spinners



Beyond the traditional book review

It is probably good practice not to require a book review to be produced on every book read in the Reading Challenge. This could turn a worthwhile activity into a chore! The Royal Society Young People's Book Prize recommends the following questions as especially appropriate for science information books:



- Was the layout helpful – making the information clear or easy to use and understand?
- How well does the book help you understand the topic?
- Was it interesting – telling you new information?
- Was it appealing – making you want to find out more about the subject?

Children could:

- Prepare a book review for the **school newsletter, local newspaper**
- Prepare book reviews in the form of **tweets, PowerPoint presentations, or videos** for the school website
- Design an '**advertisement**' for a favourite science book

- Write a **'better blurb'** for a science book cover
- Offer a **star rating** and comment for the book, as in an Amazon review
- Design a **poster** to promote the book for the school or local library

Book talk and pupil book presentations

Book presentations are accessible for all levels of ability but may be particularly suitable for young people for whom a written task could be counter-productive to the enjoyment they had derived from reading the book.



Children could:

- select their **favourite passage** from a science book they enjoyed and either they or the teacher reads it to the class
- prepare a 'pitch' for a favourite science book - this could involve making a 'book trailer' video - **'Big up your Book.'** They have 10 minutes to prepare a 'pitch' for their favourite science book and 1 minute to make their presentation
- become a **'Book Ambassador'**
- prepare a **'news' item** on video (television) or audio (radio) relating to a science book
- prepare a school or class **assembly** or a presentation for a specific group themed around science books, with, for example, PowerPoint presentations, science-related music, science demonstrations.
- set up a school **'science book jury'** or 'science book judging panel' to choose your science book of the year, or participate in the Royal Society Young People's Book Prize (<https://royalsociety.org/grants-schemes-awards/book-prizes/young-peoples-book-prize/>)
- hold a **'Desert Island Science Books'** session where each participant nominates a set number of science books to keep with them
- generate **questions** relating to the preparation or content of a science book to ask its author (if she or he has a website), a scientist, science teacher.
- participate in a **Book Club** type session with all those who have read the same book

Drama and role-play

Children could:

- Prepare and act out a drama, or role-play (**hot-seating** or **interviewing**), based on ideas from a science book
- Use role-play or a **monologue** to describe the life and work of a scientist described in a science book
- Write and act a drama for a school or class assembly to promote the reading of science books



Reading Buddies and Mentors

Children could:

- In **pairs** read science books together as buddies
- Read science books together, with an **older child** acting as a mentor to a younger child



Art & Craftwork

Children communicate the science they have learned through art and craftwork:

- through the design and making of **bookmarks** and **book covers** (remember to include blurbs!)
- through the design and drawing of **story boards, cartoons** and **comic strips**
- through the design and making of **board games** to accompany particular science books
- through the design and making of **models** and **dioramas**
- through **paper engineering** - designing and making lift-the-flaps, pull-outs and spinners



Important points to note.

Some craftwork will require risk assessments to be undertaken in advance. CAUTION: though there are plenty of online sites and books giving instructions on paper- engineering, many of their ideas (particularly the making of pop-ups) require the use of very sharp cutting tools which would be inappropriate for young children to use. Again, it may be necessary to remind children that they need to pay as much attention to the science information they are presenting as to the method used. The medium should not overwhelm the message!

Library Links

Children could:

- **role-play 'librarians'**, grouping books as 'Science books' and 'Not Science Books'
- act as 'pupil librarians' assisting in the management of the book corner, class library or, if relevant, the school library
- help prepare attractive science book **displays for the book corner**, class library, the school library (if relevant) or school circulation areas (if appropriate)
- encourage others to 'Read Science' through making and **distributing book marks**, designing and displaying **posters**, PowerPoints, **school screen savers**, videos, etc. around the school and by doing presentations as part of school Science Assemblies
- plan a school-wide plan 'campaign' to encourage other children to read science for pleasure
- participate in a class visit to the **local public library** and engage in science reading and science activities there
- design and make posters and PowerPoints for display in the local public library

