



the lost words

CHALLENGE CARDS

‘Gorgeous to look at and to read.
Give it to a child to bring back the
magic of language – and its scope’

JEANETTE WINTERSON, *GUARDIAN*



About the Book

All over the country, there are words disappearing from children’s lives. These are the words of the natural world – Dandelion, Otter, Bramble and Acorn, all gone. The rich landscape of wild imagination and wild play is rapidly fading from our children’s minds.



The Lost Words stands against the disappearance of wild childhood. It is a joyful celebration of nature words and the natural world they invoke. With acrostic spell-poems by award-winning writer Robert Macfarlane and hand-painted illustrations by Jackie Morris, this enchanting book captures the irreplaceable magic of language and nature for all ages.

About the Lost Words Challenge Cards

In this pack you’ll find a series of 12 challenge cards, all themed around *The Lost Words*. You can dip in and use as many of the cards as you like with children to help them think about the world around them in lots of interesting and important ways.

The purpose of these challenges is to develop the aims of the national curricula by cultivating:

- Ambitious, capable learners
- Enterprising, creative contributors
- Ethical, informed citizens
- Healthy, confident individuals

(WELSH GOVERNMENT)

- The spiritual, moral, cultural, mental and physical development of pupils at the school and of society
- Pupils at the school for the opportunities, responsibilities and experiences of later life

(DEPARTMENT FOR EDUCATION – ENGLAND)

- Successful learners
- Confident individuals
- Responsible citizens
- Effective contributors

(EDUCATION SCOTLAND)

- An individual to achieve personal fulfilment and individual well-being through living a successful life
- A contributor to society to be concerned for the well-being of others as well as themselves, in their own society and beyond it
- A contributor to the economy and the environment to appreciate how employment will impact on the economic choices they make and how they, in turn, impact individually and collectively on the environment

(CEA – NORTHERN IRELAND)

We hope you can enjoy these challenges with lots of children and we’d love to hear about how you’ve been using them and what the children have enjoyed. Please share your photos and stories with us on Twitter with #TheLostWords and tag us @PenguinUKBooks and add any images to the Lost Words for Schools padlet <https://padlet.com/LostWordsforSchools/lwfs>

Thank you!
The Hamish Hamilton Team



the lost words

1

CREATE A LOST WORDS ENVIRONMENT/NATURE SPACE

These are some of the words that were lost. All of these things are plants. Some of them are bigger than others, some you can eat. Become a nature detective and investigate each of them. Decide how you could group them in different ways, explaining your choices when you share your findings.

acorn ash beech beetroot blackberry bluebell
bramble buttercup carnation catkin cauliflower
chestnut clover conker cowslip
dandelion fern gooseberry gorse hazel crocus
holly horse chestnut ivy lavender heather
leek mint pansy parsnip poppy primrose
radish rhubarb spinach sycamore tulip
vine violet walnut willow

Things you need to decide on when creating a nature space:

An area where you can grow plants. Size will determine the types of plants you can grow. It could be as small as a collection of plant pots, a raised planting area or a patch within school grounds. Or it could be a larger area in the school grounds, waste land or a deforested area.

- Orientation of the area: north, south, east, west, as this will determine what you can grow successfully.
- How to find out about permissions for planting; you might work in collaboration with a local community organization, e.g. Wildlife Trusts, gardening groups, care homes.
- Which plants to grow: this will be determined by the mature size to which plants grow and how long they take to grow, so you will need to research this.
- The purpose of the area: e.g. to attract insects, birds, provide a supply of herbs, a sensory garden, grow food.
- Sourcing of seeds or plants, soil, tools.
- Water supply, e.g. collecting rainwater.
- Storage of equipment.
- Budget for the project and possible fund-raising ideas, e.g. writing for support to supermarkets, garden centres, seed companies.
- Time-scale of project.
- Maintenance of the area.
- How to record the development of the area over time.

Create:

An action plan: e.g.

Action	Resources	Costings	Time scale	Responsibility	Results achieved (date)

The RHS website has an abundance of useful information and resources, with lots of additional ideas. You might find that you qualify for one or more of their five awards.
<https://schoolgardening.rhs.org.uk/school-gardening-awards>



the lost words

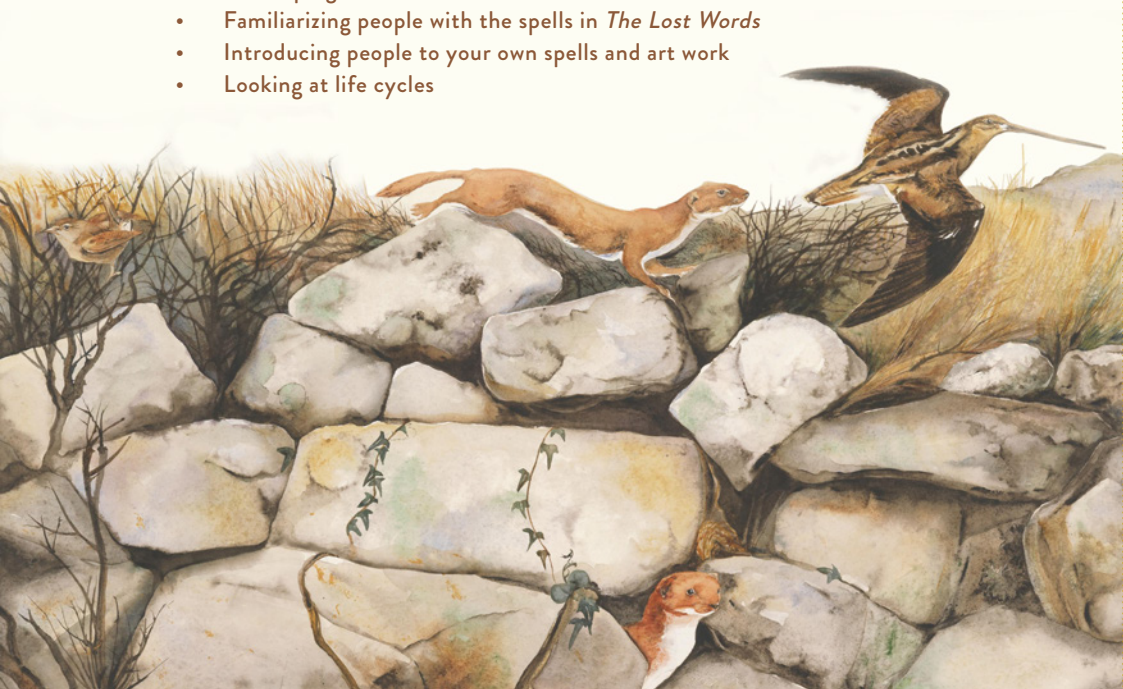
2

CREATE A LOST WORDS NATURE TRAIL

Working in small groups, consider what you'd like to achieve by creating a nature trail.

For example:

- Encouraging people to look more closely at the natural world
- Developing identification skills
- Familiarizing people with the spells in *The Lost Words*
- Introducing people to your own spells and art work
- Looking at life cycles



Decision time

Consider all your options before making decisions:

- Location – it could be school grounds, playing fields, woodland, parkland, hedgerows, graveyards. Check whether you need permission to access this, in which case you may need to write a formal letter or email.
- Route to location
- Mapping of location. You could use GPS
- Points of interest
- Instructions – method of moving people from one point to the next, e.g. QR codes, clues, map co-ordinates, markers. All of these will need to be designed and weatherproof
- Identification keys/guides
- Colour and texture swatches for matching activities
- How people will record their responses: e.g. electronically, on an annotated map, written descriptions, sketches, poems, spells, bark rubbings, crossword answers, word search, quiz answers, word-snakes
- Timings for working your way around the trail

Planning

Create an action plan for developing the trail: e.g.

Action	Resources	Costings	Time scale	Responsibility	Results achieved (date)

Trial run

- Trial the trail and troubleshoot any teething troubles!
- Publicize your trail with carefully designed posters/invitations using persuasive language.



the lost words



3

CONJURING BACK THE LOST WORDS

‘Cambridge researchers seeking to “quantify children’s knowledge of nature” surveyed a cohort of four to eleven-year-old children in Britain. The researchers made a set of 100 picture cards, each showing a common species of British plant or wildlife, including adder, bluebell, heron, otter, puffin and wren. They also made a set of 100 picture cards, each showing a “common species” of Pokémon character, including Arbok, Beedrill, Hitmonchan, Omanyte, Psyduck and Wigglytuff.

‘The children were then shown a sample of cards from the two sets, and asked to identify the species for each card. The results were striking. Children aged eight and over were “substantially better” at identifying Pokémon “species” than “organisms such as oak trees or badgers”: around 80 per cent accuracy for Pokémon, but less than 50 per cent for real species. For weasel read Weedle, for badger read Bulbasaur – and this was before the launch of Pokémon Go.

‘Children are presently “more inspired by synthetic subjects” than by “living creatures”.’

ROBERT MACFARLANE

How can you change this?

IF WE CAN'T NAME SOMETHING, DO WE NOTICE IT, DO WE CARE ABOUT IT?



- Conduct your own school investigation to discover which words, naming the natural world around us, have been lost; which trees, which flowers, which birds, which bugs and beasts.
- The quickest way to gather the data would be to ask people to answer an electronic questionnaire or quiz, such as Microsoft forms, where you can insert pictures for people to identify. Alternatively, you could make your own set of identification cards for each group of living things.
- Use the data generated to create a school display so that everyone is made aware of which creatures and plants are the most unfamiliar.
- How will you ‘conjure the names back into the mouth and the mind’s eye’?
- You could create your own grimoire of summoning spells – weave a gauze of sound in the naming of the unknown, and present these to the school as performance poems, perhaps accompanied by music or sound effects that you have composed to accompany your words.
- Decide on other ways best to share knowledge with other people in your school, teach adults as well as children the naming of the natural world. You might produce a performance of the *Lost Words* spells, or use some of the ideas from the other challenge cards, or develop some of your own.
- Perhaps each group could be responsible for a different class of living things. Set a recognition target for each category: trees, flowers, birds, bugs and beasts, so that everyone in your community is able to recognize more species in the natural world. Set a time scale and then issue the questionnaire/quiz again to measure your success as spell makers and conjurers.



the lost words

4

CREATE YOUR OWN LOST WORLD

This could be in the format of a narrative story, play, puppet play, comic, graphic story, picture book, diary, blog, animation, film or dance.

The challenge: to include as many of the 'lost words' as possible, as naturally as possible in your story.

*There are said
to be seven basic
plot lines:*

1. Overcoming the monster
2. Rags to riches
3. The quest
4. Voyage and return
5. Comedy
6. Tragedy
7. Rebirth

*Think about some of
the different genres
of creative writing:*

- Science fiction
- Drama
- Action and adventure
- Romance
- Mystery
- Horror
- Fantasy
- Historical
- Myth/legend
- Fairy story
- Crime
- Narrative non-fiction

Play around with some ideas, until you settle on one which you think will work well. If you can't decide, you could pick one at random.

Plan your story, using pictures or a story map, thinking about characters, settings and plot, jotting down initial ideas and vocabulary that you can use as you progress through the story or script. Thesauruses are a very useful tool. Make sure you think about:

WHO, WHEN, WHERE, WHAT, WHY,
HOW – *some of the lost words could be characters
in your tale, some might appear incidentally*

BEGINNING – *who/where/when*

MIDDLE – *why and how*

ENDING – *take what is around the 'what' and you have the ending*

When planning, you could start with the ending, so that you know the final destination!

Try composing several opening lines to see which will hook the audience most effectively. You could start with dialogue, a question, information, or metaphor or simile.

Create your first draft, stopping to check the flow of the story. Remember 'show, not tell' is an effective technique to keep the reader engaged because they want to find the answers to questions that arise.

Revise and edit, checking for accuracy.

Create your final draft of your story, comic, graphic story, picture book or diary.

Start the production process if you have created a play, animation or film.

You could present them all in a Lost Word Festival, for which you could issue invitations, advertising the event beforehand with posters and social media.

You could also find out about any competitions for which your work might be eligible.





the lost words

5

BEFRIENDING BIRDS

How well do birds like your school grounds/garden?
Undertake a survey of the school/garden to discover
which birds visit and in what numbers. Decide how best
to record the information.

Research and discuss how you can make the environment even
more appealing to encourage a wider variety of birds. Think about:

Habitat | Diet | Shelter | Water | Supply

RECOMMENDED WEBSITE

<https://www.rspb.org.uk/fun-and-learning/>

Draw up an action plan and decide who will be responsible for
which aspects of your project.

Action	Resources	Costings	Time scale	Responsibility	Results achieved (date)



SEASONAL ACTIVITIES

*January – February –
Big Schools' Birdwatch.*

Creating bird boxes ready for National Nest Box Week,
promoted by the British Trust for Ornithology in February.
The BTO provide an information pack free of charge and
their website has a lot of interesting information.

<https://www.bto.org/about-birds/nbw/information-pack>

http://www.bbc.co.uk/breathingplaces/nest_box/



FEEDING BIRDS

This is not as straightforward as you might think. There are different
requirements at different times of the year. Predict what these might be and why,
then check if you are right by consulting:

<https://www.rspb.org.uk/birds-and-wildlife/advice/how-you-can-help-birds/feeding-birds/when-to-feed-garden-birds>

Decide how best to organize the feeding of the birds and draw up a plan.

WEBCAMS

These can be set up near feeding areas or
in nest boxes. It is interesting to keep a log
of all your observations: the more you look,
the more you notice, and the more you notice,
the more you learn about the different birds
and their characters and behaviour.





the lost words

6

CREATE A LOST WORDS PATCHWORK

Allocate the lost words to different people – you may wish to include other ‘lost words’ as well.

Before you begin, have a look at different patchwork quilt patterns:

<https://americanmuseum.org/visiting-us/shop/publications/classic-quilts-from-the-american-museum-in-britain/>

<https://www.vam.ac.uk/collections/quilting-and-patchwork>

Look at the geometry and pattern-making within each quilt. Patchworks are often collaborative pieces of work, with everyone working as they tell stories.

Remember that you could incorporate words as well as pictures, and patchwork doesn't have to be made of fabric.



PLANNING

Agree on:

- Which materials you are going to use: e.g. paper, fabric, fabric pens, wool, embroidery thread, cotton, natural materials, paint (water colour, acrylic, oil paint), pastels, inks, mosaic tiles, clay, photo transfer, printing materials.
- Where the final artwork will be displayed and how this will be done, e.g. base board or fabric base, use of crystal CD cases for individual patches.
- The size and shape of each patch. They will need to tessellate and you may decide to incorporate more than one shape. Experiment with different shapes using rough paper to determine which design works best.
- How you will join them together, e.g. fabric and paper can be sewn, particularly if you have access to a hand sewing machine. Look at Jackie Morris's work: <http://www.jackiemorris.co.uk/blog/stitching-souls-and-a-different-way-to-blog/>

THE CREATION

- Using Jackie Morris's paintings and Robert Macfarlane's spells to inspire you, collect your own sketches, or words and images together. Have several attempts before determining which ones you like best.
- Plan and practise your design.
- When all the designs have been completed, try arranging them in different ways and photographing them so that you can ponder which is the most striking lay-out.
- Attach them to your base, whether it is fabric, board or wood. You may want to use stitching, glue or mounting tape.
- Arrange for an adult to hang the completed Lost Words Quilt.

You could have an unveiling where you perform chosen spells and/or your own poems.

Invitations could be issued, incorporating an image of a section of the quilt as part of the invitation design, ensuring that you don't reveal the whole design before the unveiling.





the lost words

7

DESIGN THE IDEAL DEN AND WILD HABITAT FOR YOUNG PEOPLE

First, decide where your den will be sited. It needs to be a safe place and you may need to gain permission for construction by writing a formal email or letter.

What rules do you think should apply to den construction if you are also showing respect for the environment? Reach a class agreement.

A GOOD EXAMPLE IS FROM THE EDEN PROJECT:

The Den Commandments

- Respect the environment.
- Please don't damage the den site; true den-masters leave no trace.
- Always tidy up after yourself. Please don't drop litter, especially if you use man-made materials.
- Look after living trees and plants: they take years to grow and seconds to destroy.
- Check whose land you are planning to build on: you don't want to be chased off halfway through and you don't want to upset the neighbours.
- Don't steal from other peoples' dens!

WORKING IN SMALL GROUPS, PLAN AND DESIGN THE IDEAL DEN, USING NATURAL MATERIALS AS FAR AS POSSIBLE.

Create a mind map of the different features you think a den should have. The Woodland Trust has useful information:

<https://www.woodlandtrust.org.uk/naturedetectives/activities/2015/09/tree-mendous-den-building/>

Sketch your ideas out with annotations.

Now make a more detailed scale drawing on squared paper, not forgetting to show the scale.

Map the area, showing the site of your den.

Draw up a list of resources, how to source them and any costings.

If any resources you need are not free, decide how you can raise the funds to cover costs.

Build your den!

Record the construction process by photographing or filming so that you can create a set of instructions or an information video. Time lapse is a wonderful way to do this!



the lost words

8

LION'S TEETH INVESTIGATION, OR DANDELION MATHS

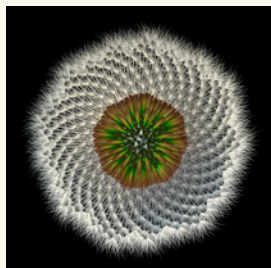
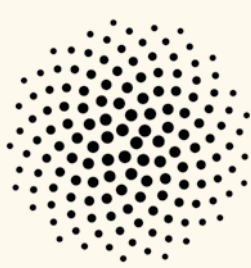
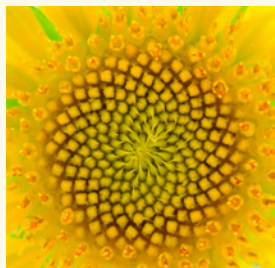
Plants exhibit some amazing mathematical patterns, as this breath-taking high-speed video by Vi Hart shows. Don't worry if you don't understand it all, just enjoy and then look at dandelions and other plants more closely to see what patterns you can discover.

<https://www.youtube.com/watch?v=ahXIMUkSXX0>

https://www.youtube.com/watch?v=IOIP_Z-0Hs\

THE FIBONACCI SEQUENCE

0	1	1	2	3	5	8	13	21
34	55	89	144	233	377	610	987	



ACTIVITY A

Take photographs of dandelions at different stages in the life cycle. Look carefully and see if you can trace patterns with a pencil. Try working in opposite directions if you identify spirals to see if you come up with the same number. Do the numbers identified fit into the Fibonacci sequence?

ACTIVITY B

- Using your school and surrounding environment, gardens and parks, find and map where dandelions are growing
- Identify a large grassed area that you can investigate.
- Measure the area and map it out to scale
- Using a quadrat (a portable frame) measuring 1m x 1m find out how many dandelions are growing in a large grassed area by placing the quadrat randomly at different points within the area. Count the number of dandelion plants within the quadrat and record on your map
- How will you find the approximate number of dandelions growing in the entire area?

ACTIVITY C

Do the dandelions grow differently in different habitats?

For example

- lawns, field, hedgerows, pavements
- light areas, shady areas

Take and record measurements of plants in different habitats in order to compare findings accurately.

- length of longest leaf of each plant
- length of longest stem of each plant
- angle of leaves in relation to the ground – create your own angle measurers from folded paper to make right angles and 45°

Decide how to share and record your findings to generate data displays which you can analyse. Then devise a series of questions for people to answer.





the lost words

9

THE DANDELION DEBATE: WEED OR WILDFLOWER?

*'A weed is just a wild flower
growing in the wrong place.'*

The dandelion flower represents the three
celestial bodies of the sun, moon and stars.

The golden flower resembles the sun,
the puffball globe, the moon, and the
dispersing, drifting seeds the stars.



FIND THE FACTS

Investigate the case of the dandelion: its uses and its nuisance factor. Conduct some research and collate a list of pros and cons.

These are interesting articles on the subject. You could highlight the pros in one colour and the cons in another:

<http://mydandelionisiflower.org/did-you-know/>

<https://www.countrylife.co.uk/nature/rocking-around-dandelion-clock-163059>

<https://www.telegraph.co.uk/gardening/how-to-grow/dandelions-heroes-spring-deserve-place-garden/>

PERSISTENCE AND SPREAD

Individual plants may survive for ten to thirteen years in undisturbed sites. Dandelion seeds can form a relatively persistent seedbank. Seed in soil has a half-life of three months. If buried, a few seeds may still remain viable at the end of five years. Seeds are killed by storage at 27°C with 80 per cent humidity.

Dandelion reproduces both vegetatively and from seed. Even small fragments of root left after plants are pulled may regenerate but thicker root pieces regrow better than thin ones. The orientation of fragments can influence survival. The time of year can also affect regeneration.

Dandelion seeds are wind dispersed and may travel up to 500m from the parent. Seeds have been recovered from irrigation water and can survive submergence for nine months. Viable seeds have been found in cattle and horse droppings. Seedlings have been raised from the droppings of various birds.

<https://www.gardenorganic.org.uk/weeds/dandelion>

DEBATE THE POINT

In threes, allocate the roles of supporter, protester and observer. Hold a debate, arguing the points that uphold your case. Remember that in a debate the skill of listening is just as important as speaking in order to put forward convincing counter-arguments.

Meanwhile, the observer will note down points carried either for or against as the debate progresses, and reach a final decision in favour of the most convincing argument.



Two illustrations of a bird, likely a frigatebird, in flight. The top illustration shows the bird from a side-on perspective, with its wings spread wide, revealing a large yellow patch on the underside of the primary feathers. The bottom illustration shows the bird from a more dorsal perspective, also with wings spread, highlighting the yellow and black patterns on the wing undersides. The bird has a dark body, a white forehead, and a red beak.

10

This amazing coat of many words was posted on the Lost Words for Schools padlet – the first *Lost Words* World Book Day costume that we know of.

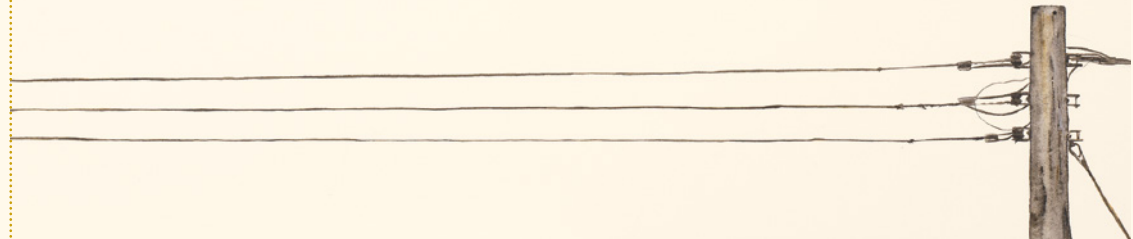
For World Book Day or any other occasion.



How could you

- create a chain of connections for **acorn**, perhaps using shadow puppets?
- face-paint your face as an **adder** or create a sinuous moveable adder puppet?
- create a **blackberry** head-dress?
- become a **bluebell**?
- make yourself into a **conker** or create a puppet play for this spell?
- dress yourself up as a **dandelion**?
- turn into a **fern** in green and lace?
- use colour to become **heather**?
- entwine yourself in **ivy**?
- create a **kingfisher** or a **heron** cloak and convey the quality of their movements?
- create a **lark-on-the-wing** head-dress?
- wear the bright cloak of the thieving **maggie** with a waistcoat of silver trinkets?
- create the frilly back of the tiny, shiny **newt**?
- slip your skin and become an **otter**?
- make a mask or puppet for **raven**?
- make yourself into a murmuration of **starlings** or create a murmuration of **starlings** using shadow puppets?
- be the small spark of speed that is a **weasel**?
- cloak yourself in slender **willow** leaves?
- suggest the flick flight of the **wren**?
- investigate animal tracks and use the patterns?
- create a **goldfinch** costume or puppet to charm?

Post your finished costumes onto the Lost Words for Schools padlet:





the lost words

11

CREATE A 'WILD' SHOP TO HELP FUND YOUR REWILDING ENTERPRISES

Here are a few ideas of items you could design and sell:

- Postcards of poems and wild art
- Mobiles – e.g. a charm of finches, a chime of wrens, a murmuration of starlings
- Books or CDs – e.g. pupils' creative work; ways to care for wildlife
- Tickets to performances of poetry, plays, puppet shows and stories
- Bird feeders
- Seed bombs
- Bug hotels
- Bookmarks
- Greetings cards
- Matching pairs game
- Top Trump cards
- Identification cards
- Coasters
- Fridge magnets
- Bags
- Keyrings

GREAT IDEAS AND INSTRUCTIONS

<https://www.woodlandtrust.org.uk/naturedetectives/blogs/nature-detectives-blog/2017/08/build-a-bug-hotel/>

<https://www.rspb.org.uk/birds-and-wildlife/advice/gardening-for-wildlife/insects-and-minibeasts/>

<https://www.rspb.org.uk/fun-and-learning/for-teachers/lesson-plans-and-supporting-resources/homes-for-nature/>

- Decide how and where you are going to publicize and advertise your products and services in an eye-catching, engaging way.
- Keep a spreadsheet of costs and profits.
- Create a committee to produce a spending plan to finance your rewilding projects.

Share your 'wild shop' ideas on the *Lost Words for Schools* padlet:

<https://padlet.com/LostWordsforSchools/lwfs>



the lost words

12

THE LOST WORDS GAMES FESTIVAL

Work in small groups to devise a board, card or computer game based on the *Lost Words*.

You could include a variety of elements.

For example:

links to the words and images of the spells

facts about the plants and animals

identification of different living things

definition of word meanings

threats to the natural world

benefits to the natural world

a nature detective quest

collecting lost words

creating spells

WRITE OUT A SET
OF INSTRUCTIONS,
MAKING THE AIM
AND RULES OF THE
GAME CLEAR.

SKETCH OUT
DIFFERENT IDEAS
AND RULES TO
FIND OUT WHICH
WORKS BEST.

THINK ABOUT THE
DESIGN, LAYOUT AND
MATERIALS YOU NEED.

PLAY AND
TROUBLESHOOT
ANY PROBLEMS,
ADAPTING YOUR
IDEAS ACCORDINGLY.

CONSTRUCT YOUR
GAME, WITH ANY
CARDS (PRINTED
OR HAND-MADE),
COUNTERS, DICE
NEEDED.

ORGANIZE A
GAMES FESTIVAL.

TEACH OTHERS
HOW TO PLAY.