

ISSUE 02 SPRING 2018

CLEAPSS

EXPLORE

SCIENCE, D&T AND ART



SPRING

into science

NEW
WEBSITE

PASS
WORD

HATCH
A CHICK



CLEAPSS COMMENT



Exciting opportunities ahead for primary practical work as we step into spring, the season of budding new ideas!

...and it's not only CLEAPSS which is looking to the new. In January, at the ASE annual conference, Amanda Spielman, Her Majesty's Chief Inspector, Ofsted, commented on the changing emphasis from Ofsted in primary inspections to an increased focus on the wider curriculum. Linked to this, she also remarked that Ofsted's next research program will concentrate on primary science. We believe that this subtle shift creates opportunities for primary science to provide essential breadth and balance as well as appropriate challenge, perfectly complimenting literacy and numeracy.

As always, we are here to help.

In this issue of EXPLORE we have focussed on practical ideas that can take place in, or relate to, the world around us outside the classroom. Our teaching idea shows how to design a lever

system to hatch a spring chick and the leadership article supports working with ponds. We also look at our competition 'No more cabbage!' that encourages your children to use practical enquiry to test natural products, perhaps from the school grounds or their own gardens.

Since the last issue we have attended the ASE conference in Liverpool where we showcased some of our new practical activities. It was great to talk to so many of you and hear how you use our resources in your classrooms. Don't worry if you missed us, all the resources we presented can be found on our website. This issue gives hints and tips about how to find these, and other resources. Most importantly it also includes your new log-in details.

Last but not least, we have specialist primary CPD courses running in Leicester, Birmingham, Wigan and Leigh. Search [courses](#) for full details. As always don't forget you can call us on the Helpline [01895 251496](tel:01895 251496) or email us via primary@cleapss.org.uk



Enjoy getting practical
this spring!

Maria

Lead Primary Consultant at CLEAPSS





OUT!

LET ME

Easter is fast approaching, what better way to incorporate some D&T into your Easter cards/displays than by hatching a chick out of an egg!

Our new quick and easy activity **Hatching spring chick** provides the ideal context for your children to make a product that includes a simple, first class lever mechanism.

Mechanisms are devices that make jobs easier to do. Levers are used to help move loads (anything being moved) with a small, or smaller, amount of effort than normal.

So how can we use a mechanism to help hatch our chick?



This flexible activity supports children to explore how levers work, and gives them the opportunity to be creative. Depending on the ability of your class and your objective, it could be open-ended, or teacher-led. Children could use the same principles to make an alternative design or incorporate a lever into another sort of product eg a story or science book of their own creation.

Full details and templates for the activity can be found in the Teaching ideas area of the website or simply search **chick**.

OVERVIEW



Children cut out a chick, lever and egg template from coloured card.



They arrange the parts on a card background.

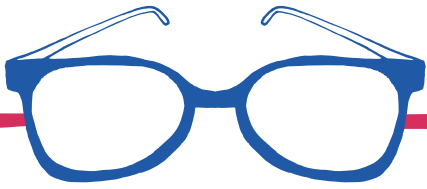


Then by trialling and testing different pivot points and positions they explore the best configuration to take the top of the egg off.



Once they are happy with their mechanism they glue the chick and bottom part of the egg to the background and attach the lever using a paper fastener.

If you would like your children to experience the wonder of watching real chicks hatch this spring, searching **chick** will also show guidance about incubating and hatching eggs and caring for chicks.



LINKED UP LEARNING

IT WAS GOOD TO
LEARN FOOD CHAINS
IN A FUN WAY

What links the important concepts of nutrition and energy transfer in living things, interdependence of organisms in habitats, and classification? What is an engaging activity that encourages children to articulate their ideas and build secure knowledge through discussion? What provides teachers with easy opportunities to assess understanding and rectify misconceptions?

The answer is the new CLEAPSS resource **Freshwater food chains and food webs** that I recently trialled. This is a great activity that got the children thinking and talking to each other to create their own food chains.

The resource is a set of cards, which provides children with tools for 'do it yourself' food chains and food webs. Several 'correct' outcomes are possible, giving the children a sense of ownership and originality, rather than simply reproducing something that has been modelled for them. The children can move the cards around, allowing them

to change their minds. This enables them to explore their ideas without having to worry about being right straight away.

The children really enjoyed the activity and became very involved. It appealed to their curiosity.

The activity was easily adapted to meet the needs of the children. It provided me with excellent opportunities for assessment by listening to their discussions and by observing how the children placed the cards eg, were the sun and producers at the start, how many animals did they

write on an arrow? I used photos to record their work.

As an extension activity, some of the children added other organisms by using the blank cards within the set.

'It was great that we could do good learning without writing!'

Overall, a valuable resource that supported learning and the development of a variety of skills.

To find this resource on the website search **Food chains**. A Make your own freshwater food chain mobile is also available.

We'd like to thank **Georgina Parker and the children at St Paulinus Primary School** for helping us trial and develop this resource.





GOT A POND? WANT A POND?

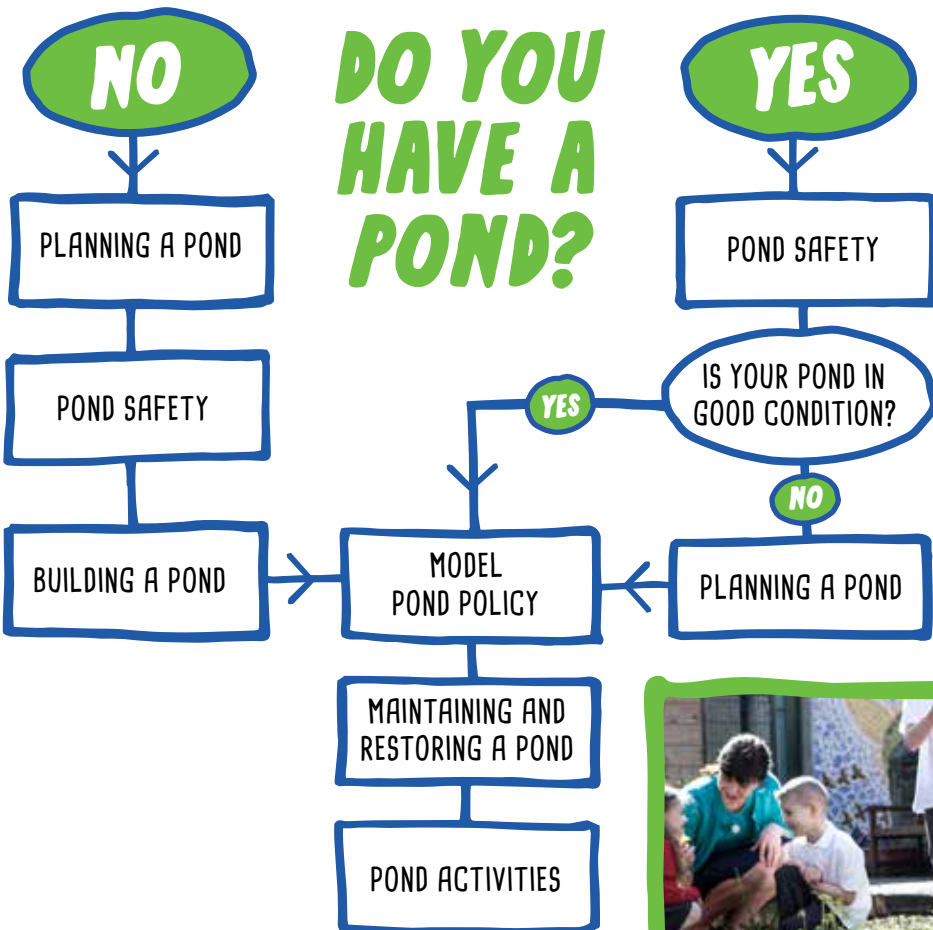
DON'T WORRY WE HAVE EVERYTHING COVERED!

The anticipation as the net swishes through the water; the thrill of discovering creatures from an unseen world; the triumph of identification; the exclamations of awe; happiness at being part of an adventure outdoors. Children of all ages find pond dipping exciting and memorable.

Ponds provide a superb outdoor learning environment for all ages, and

now is the perfect time to consider how you might use one.

Our suite of Pond documents covers planning and building a new pond, pond safety, pond management and maintenance and practical activities. The easiest way to pick the right document for you and to guide you on the order in which you might use the documents is to follow the flow chart.



LOOKING FOR IDEAS?

The lower part of the flow chart focusses on the teaching ideas. Search **Pond dipping** or **Keeping tadpoles** for examples. Teachers do however, still need to look at the **Pond Policy** document and may find the other documents useful.

WHAT IF WE DON'T HAVE A POND?

There are alternatives! Search **Planning a pond** for ideas on how to create a mini pond from a roasting tray or washing up bowl. There are also many opportunities to participate in pond dipping organised by outdoor educational centres, search **Pond dipping** for details.

If you have space, creating a pond on school grounds introduces a valuable wildlife habitat together with year-round wonder and interest. If you need more support phone the Helpline.

For a school leader the most important document is the **Model Pond Policy** which you can adapt to meet the needs of your school and teachers. However, it is important to note that all the documents contain important safety points and guide you on the various responsibilities for you and your staff.



WEBSITE SEARCH TOP TIPS

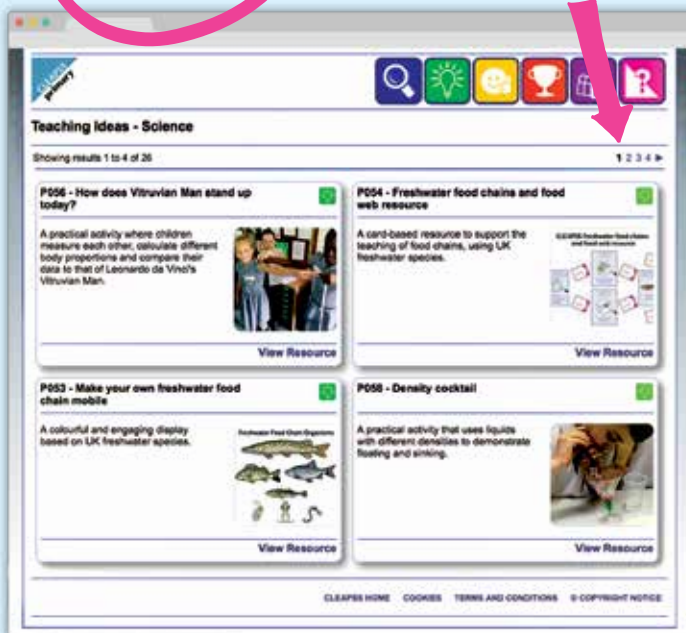
TIP 1
Search using multiple key words



We are always keen to receive your feedback about our website. Please let us know via the Helpline

TIP 2
Browse a section

New publications appear on page 1



TIP 3
Searching within a section



WEBSITE
Log-in details
for 2018

The username and password to the CLEAPSS primary website have changed. If you are a member of CLEAPSS you will be able to find this information in your school's

printed copy of the magazine. Explore issue 2 is in your school now, contact your Science Leader if you are unable to locate it. Alternatively call the CLEAPSS helpline.



COMPETITION

NO MORE CABBAGE!



Oh, the smell of boiled red cabbage; one of those smells you don't forget! Many of us have done the classic experiment, making an indicator from cabbage to show whether a substance is acidic or alkaline. But what if there were no more cabbage? What would we do?

The CLEAPSS primary competition for 2018 is to find an alternative natural indicator to red cabbage that shows a colour change in vinegar/lemon juice and sodium bicarbonate solution.

We have been busy trying different indicators and have put together some ideas to get your children started:

- 1 Look at **CLEAPSS primary indicators** on YouTube for a video of how to carry out a simple experiment.

- 2 Try practical activity **P001** first so your children can observe a colour change.
- 3 Think about natural plant products to test eg petals, leaves, stems, roots, fruits, vegetables, spices.
- 4 Why not have your children test produce grown at home or in a school garden?
- 5 How about taking a trip to the fruit and veg aisle of a supermarket to get some ideas?
- 6 Encourage the children to think about how they could extract, then test their indicators and record their results.

Remember, their entry will be judged on evidence of their enquiry process, including indicators they have trialled and why they rejected them.

SAFETY REMINDER

Some plants (or parts of plants) can be poisonous or cause allergic reactions. Ensure children do not taste or put any of the samples near their mouths and that you all wash your hands thoroughly at the end of the practical session.



BLACKCURRANT



BETROOT



FOXGLOVE



YEW

Remember, if you are not sure about a natural product, check first. Further safety information can be found on our website in the legacy area (search **legacy**). For example, G42 Plants for classrooms and L221 Developing and using environmental in areas in school grounds. Remember if in doubt call CLEAPSS.

Other useful sources include:
www.npis.org/garden.pdf
and www.RHS.org.uk



THE SCIENCE OF INDICATORS

When an acid is dissolved it makes an acidic solution, and alkalis make alkaline solutions. If a solution is neither acidic nor alkaline we call it neutral. Pure water is neutral. Some substances can tell you if a solution has acidic, neutral or alkaline properties by displaying colour changes, these are called indicators.

Search **competition 2018** for full details, rules and an application form. **Closing date for entries is Monday 16th July 2018**

Good luck and have fun investigating!

3 TeachMeet

Resounding success for ASE Primary Science TeachMeet!

TeachMeets are informal events for teachers to share their innovative teaching ideas.

The Primary TeachMeet at the ASE annual conference provided a fabulous opportunity to do just this. With unstinting support from the Wellcome Trust team, providing a delicious lunch for all those attending, all recipients felt supported and truly valued! The room was buzzing with around 85 teachers sharing lesson ideas, teaching resources they love, top tips, great websites, classroom activities and spreading the word about Explorify. Thanks to everyone who contributed.

The ASE website has details of a TeachMeet near you or be sure to sign up for next year in Birmingham!

www.ase.org.uk/ase-regions/regional-events/



What if dinosaurs still walked the earth?

What if there was no electricity?

What if we couldn't ask questions?

Explorify

Spark your pupils' curiosity and develop their thinking skills. Explorify is a new programme of free activities for primary school teachers that will help you and your pupils think about the world in a whole new way.

Find out more at explorify.wellcome.ac.uk

NO MORE CABBAGE!

Closing date for entries is 16th July 2018

Look for primary indicators competition on the CLEAPSS website www.cleapss.org.uk

*Young scientists, researchers and investigators, are you ready?
CLEAPSS invites you to participate in this year's primary competition...*