LAURA CROSS IS A FORMER PRIMARY TEACHER

# Using STEAM to have fun

It can be a struggle to keep children engaged with phonics. Here, **Laura Cross** shares three simple cross-curricular ideas to captivate their interest...

### AS EARLY YEARS PRACTITIONERS, it's important to help children experience the same learning in a variety of contexts. You might therefore want to try these activities in different areas of your setting, or even outdoors, making each of them as playful and fun as possible.

# GO FISHING FOR LETTERS WITH MAGNETS

### WHAT YOU'LL NEED:

Sticks or pencilsString

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Magnets (fridge magnets work)Letters with paperclips taped on

Alternatively, if you have magnetic letters, you can use these and attach a paperclip to your fishing rod instead. You need to either fish with a magnet or catch magnets.

### INSTRUCTIONS

1. In advance, create fishing rods by tying the string around the stick and attaching the magnet or paperclip at the other end.

2. Lay out your letters on the floor, facing the children if possible. Demonstrate how to fish for the letters and talk about how the magnet and magnetic items are attracted to each other.



**3.** Call out sounds for children to fish for with their magnetic fishing rod. They could call them out for each other to make it a game.

**4.** As the children catch their letters, support them to make short words or simply say the sounds.

### EXTRA STEM TWISTS

I Try putting the letters into a water tray if they're waterproof. Children can play at real fishing and talk about the letters and other objects in the water sinking or floating.

[] Make some of your letters magnetic and others not, and predict and discuss which items are magnetic. Some items you could tape to your letters to investigate include: coins, paperclips, stones, leaves, hairclips, paper.



Activity sheet

# DECIPHER LETTER CODES WITH MIRRORS

### WHAT YOU'LL NEED:

Small mirrorsPaper or mini whiteboardsPencil or pen

### INSTRUCTIONS

1. In advance, write some letters backwards (it might take a bit of practice!) on pieces of paper or whiteboards. Tell the

children it's a special code they can only read using a mirror.

**2.** Show them how to hold the mirror to see the letters the right way when they read them in the mirror.

**3.** Ask what letter they see. Talk about how things look backwards when reflected in a mirror. Holding the mirror and understanding where to look may take some practice.

**4.** Once the children have understood what to do, have them identify a series of letters, or some short words if appropriate, written on slips of paper or whiteboards.

**5.** You could make this more playful by writing each set of letters or each word on a slip of paper which you laminate and keep in a box. Call this box the Secret Code Safe and tell the children you need them to read the codes to save the day! Working as a team, they need to read the codes with their mirrors.

### EXTRA STEM TWISTS

Talk about symmetry by asking which letters look the same in the mirror and on the paper, and why. Explain that symmetry means the same on both sides and talk about the middle line (line of symmetry) being the place they need to put their mirror. Most children will need help identifying this.

I Try the same activity with maths by using numbers and shapes, identifying those that are symmetrical and their lines of symmetry.





Activity sheet

# **TRACE LETTERS WITH MAGNETS**

### WHAT YOU'LL NEED:

Magnet strong enough to work through cardboard
Sheet of cardboard, approximately A3 size
Penny (make sure it's magnetic - some old ones aren't!)
Marker pen

### INSTRUCTIONS

**1.** In advance, draw fairly large bubble letters onto the cardboard. You could write letters or words. Mark a large dot at the correct starting position for each letter.

 Put a penny at the starting position for one letter. Hold the magnet behind the cardboard so the penny is attracted to the magnet through the cardboard.
Demonstrate how you can move the magnet on one side and the penny will follow it on the other side. Talk about the penny being attracted to the magnet.

**3.** Now children can try to move the magnet to trace the shape of the different letters with the penny, using the correct formation. This is tricky!

### EXTRA STEM TWISTS

Find some other items that the children predict they can use to trace the words, to identify and sort magnetic and non-magnetic items in your setting.

I Try adding a second layer of cardboard to see if the magnet will still work. How many layers will it work through? Children could also test if their magnet works through other items in the setting (such as chairs/ tables/easels).

