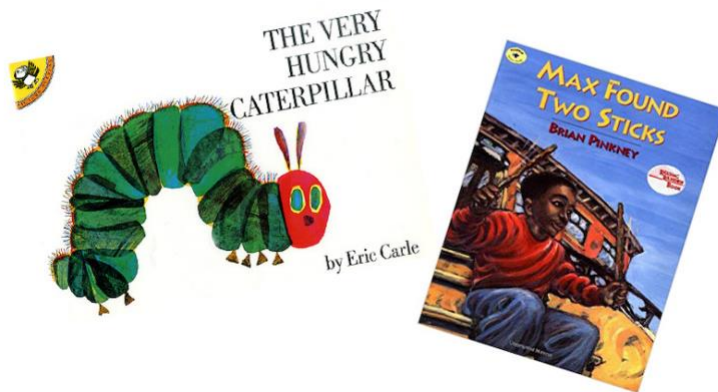


Example ELSA Preschool activities from our Educator app



1. Books about patterns

(Patterns and Relationships)

Share a book that provides opportunities to explore patterns using common attributes such as colour, size, shape or sound.

Encourage children to notice colour, sizes or shapes. Invite children to look around the centre and identify any patterns that are similar to the ones in the book you are reading together.

Encourage children to use musical instruments – triangles, beat sticks, shakers, etc. – to copy the patterns in the books. For example, a big, medium, small pattern in the book might become the sound of a triangle, beat sticks and shakers.

Try these examples or find your own. [Let us know](#) if you find a great book to engage children in this experience.

- *Max Found Two Sticks* by Brian Pinkney
- *The Very Hungry Caterpillar* by Eric Carle
- *No Dodos: A Counting Book of Endangered Animals* by Amanda Wallwork
- *Nature's Paintbrush: The Patterns and Colors Around You* by Susan Stockdale

STEM Practices

- Imagination
- Questioning
- Using appropriate language and vocabulary

EYLF Outcomes

- Children interact verbally and non-verbally with others for a range of purposes (Outcome 5)
- Children begin to understand how symbols and pattern systems work (Outcome 5)



2. One child leads and others follow

(Location and Arrangement)

One child can help other children move from a start point to an end point on a grid marked on the floor by giving directions to follow. These directions can be verbal or symbolic (e.g. 'Turn left at the next square' or they could use an arrow to indicate 'go left').

Children then switch roles and repeat, making a different path from the start point to the end point. This reinforces that there are often alternative paths we can take on a journey.

STEM Practices

- Exploring and challenging
- Using appropriate language and vocabulary
- Teamwork
- Processing information

EYLF Outcomes

- Children develop their emerging autonomy, inter-dependence, resilience and sense of agency (Outcome 1)
- Children learn to interact in relation to others with care, empathy and respect (Outcome 1)
- Children develop dispositions for learning such as curiosity, cooperation, confidence, creativity, commitment, enthusiasm, persistence, imagination and reflexivity (Outcome 4)
- Children transfer and adapt what they have learned from one context to another (Outcome 4)
- Children interact verbally and non-verbally with others for a range of purposes (Outcome 5)



3. Can you build the same as me?

(Representations)

To play this activity, ask children to build a block structure. As they do, take photos of various stages of the building process. (You can either use the **Photo Story** tool from app one or the Camera Roll/Gallery function on the tablet.) Then, other children can use the images on the tablet to copy the sequence to build the same structure.

To develop understanding of conditionals, you can add instructions. For example, you might say ‘**If** blue blocks are used in the picture, **only** use red blocks when you are making it’.

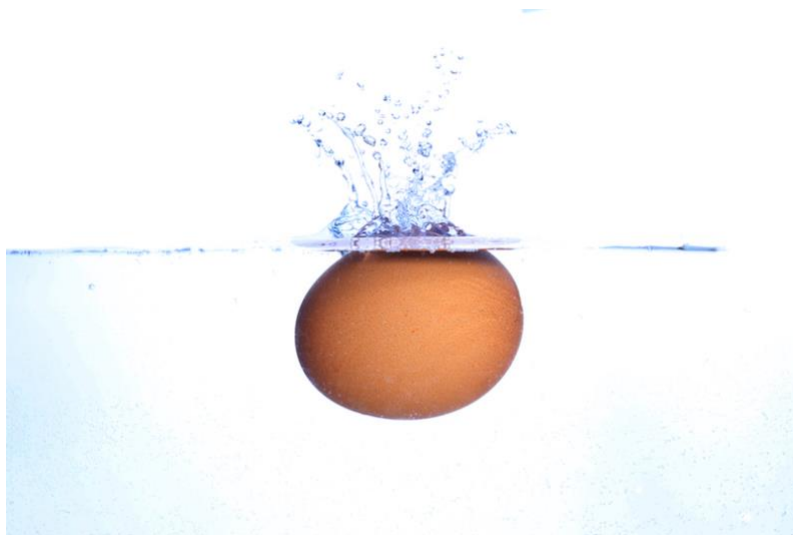
As a challenge, you could set a conditional that if one level of the building is shown in the picture, two levels must be built in the structure being remade. This added complexity will also reinforce decoding skills.

STEM Practices

- Designing and building
- Processing information
- Teamwork
- Fairness

EYLF Outcomes

- Children develop a sense of belonging to groups and communities and an understanding of the reciprocal rights and responsibilities necessary for active community participation (Outcome 2)
- Children develop dispositions for learning such as curiosity, cooperation, confidence, creativity, commitment, enthusiasm, persistence, imagination and reflexivity (Outcome 4)
- Children develop a range of skills and processes such as problem solving, inquiry, experimentation, hypothesising, researching and investigating (Outcome 4)
- Children interact verbally and non-verbally with others for a range of purposes (Outcome 5)
- Children express ideas and make meaning using a range of media (Outcome 5)
- Children begin to understand how symbols and pattern systems work (Outcome 5)
- Children become aware of fairness (Outcome 2)



4. Eggsperiments

(Investigations)

Materials you will need:

- two large jars
- cooking salt
- eggs (large and small)
- warm water
- food colouring (optional)
- a large spoon or scoop to recover the eggs

Steps to prepare for an eggsperiment:

- Fill your two jars $\frac{3}{4}$ full of warm water.
- Add about $\frac{1}{2}$ a cup of cooking salt to one of the jars. Stir and make sure the salt dissolves completely.
- Faintly colour one of the jars of water with a small drop of food dye. (This suggests to the children that the contents are different and helps you tell which is salty, without tasting it).

To start the activity, have the children carefully lower a small egg into each of the jars. Then observe what happens. Do the eggs sink or float? Is there a difference?

Ask the children if the difference between the eggs in the jars is due to the eggs or the water in the jars? How can they tell? See if the children suggest swapping the eggs to see what happens. If they don't, lead them to that idea.

Once you have swapped the eggs to different jars, ask the children what they think is happening now. As a variation, try the same activity with larger eggs. Do these behave the same as the small eggs? Ask the children to explain what is happening. You can also try this activity with some cherry tomatoes.

(Continued on next page.)

STEM Practices

- Exploring and challenging
- Generating ideas
- Using appropriate language and vocabulary
- Fairness

EYLF Outcomes

- Children feel safe, secure, and supported (Outcome 1)
- Children develop dispositions for learning such as curiosity, cooperation, confidence, creativity, commitment, enthusiasm, persistence, imagination and reflexivity (Outcome 4)
- Children develop a range of skills and processes such as problem solving, inquiry, experimentation, hypothesising, researching and investigating (Outcome 4)
- Children resource their own learning through connecting with people, place, technologies and natural and processed materials (Outcome 4)
- Children interact verbally and non-verbally with others for a range of purposes (Outcome 5)
- Children express ideas and make meaning using a range of media (Outcome 5)