

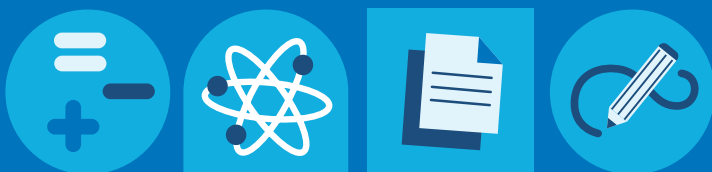
Suitable for
3-7 years

- Solo
- Pairs
- Groups

Fionah's activity

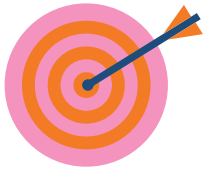
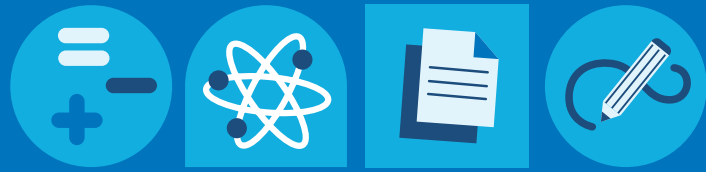
Famous structures around the world

How to guide



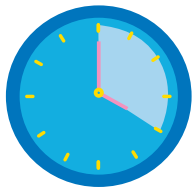
Fionah's activity guide

Famous structures around the world



Aim

The aim of this activity is to find out about the variety of structures civil engineers build by exploring different famous structures from around the world.



Time required

10:00 minutes per activity



Story to guide activity

If I built a house by Chris Van Dusen



Materials

- **Famous structure cards.** These can be found in the resource pack. Printing the resource pack gives you two copies of each structure. However, some games require four copies per structure so you might wish to print two copies of the resource pack. To obtain a printed pack of cards please [contact us](#).



Instructions

1. Explain that civil engineers like Fionah build many different types of amazing structures and show some of the cards and talk about the structures and their properties
2. Play different games with the structure cards (e.g. matching pairs etc) – see options below.
3. Extend the activity with circus skills and balances – see the guide on the website
4. Extend the activity with your own build

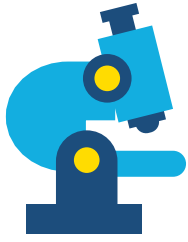
Game ideas

Structures Matching Pairs: The goal is to collect the most pairs. Place all cards face down. A player turns up two cards at a time. If they match you can keep the pair; if not return face down in the same position. Remember where they are to match the most pairs.

Swop: The goal is not to be left with a single card. Before playing remove one single structure card. Deal out all remaining cards. First each player checks for pairs and if they have any remove them from their hand. Next take it in turns for a player to pick one card (unseen) from the player to their left until someone is left with just one card.

Snap: The goal is to win all of the cards. Deal out all cards and each player keeps their pile face down in front of them. Players take it in turns to take the top card from their pile and place it face up. When someone turns up a card that matches a card already face up the first person to spot a matching pair and shouts “SNAP” wins that pair.

Happy Structures: The goal is to collect the most sets of four cards. Deal out all cards. The first player asks any other player for a particular card – you can only ask for a certain structure if you already have one in your hand. If the other player has the card they must hand it over and you can ask again. If an asked player does not have the card your turn ends and the next player takes a turn to ask.



Background information

Civil engineers are responsible for infrastructure which includes canals, roads, bridges, dams, statues, buildings, tunnels etc. Some of the structures have lasted a long time and today civil engineers are looking at how can they design sustainable infrastructure that will stay fit for purpose for a long time. Our civil engineer Fionah is really interested in the use of new materials and recycling, for example recycling plastic for use in roads.



Prompt questions

- Discuss different aspects of the structures
- What are they used for?
- Can you think of examples of similar structures near you?
- What are they made of?
- What shapes can you see in the structures?



Extensions

- Try our circus activities on structures and balances.
- Why not extend the activity by giving the children the opportunity to build a structure? This could be completely open as to what they choose or given more direction, e.g. read *If I build a house and a house build*, or linking with the presented structures e.g. to build the tallest tower or a structure with the most lean or if you want to incorporate mechanisms a structure that is a bridge that lifts up like Tower Bridge.
- Why not explore which shapes make strong structures through tower building? You could use marshmallows and spaghetti or cocktails sticks and jelly beans. How tall can you build?