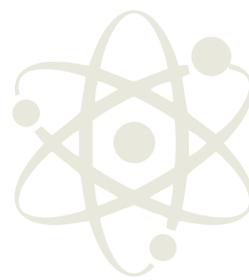




making physics matter



Age  
5-7  
years

# Scientific ideas over time

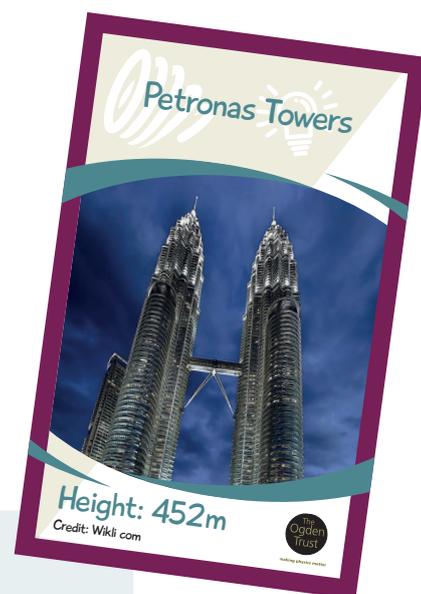
## Timeline card sort game - tallest building

### Introduction

A simple game for KS1 children who are learning about the physical properties of materials and how they are suited for different purposes. The aim of the game is for the children to correctly sequence the cards chronologically and to get rid of all the cards in their hand. In playing the game, children will develop a historical awareness of how our scientific understanding of forces, materials and structures has changed since the Ancient Egyptians built the first pyramids. Children will also develop their mathematical skills in sequencing dates.

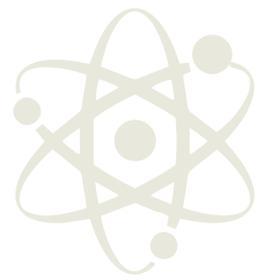
### Materials per pair/group

- One set of 24 laminated cards for each group of children. The cards are available to download from <https://www.ogdentrust.com/resources>
- A timer of some kind – egg timer or stopwatch.



### Instructions

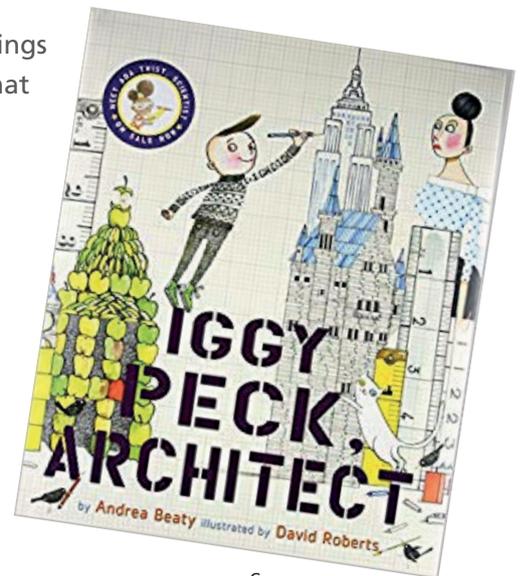
- The cards are shuffled in a pile, ensuring that the date side is downwards and hidden. Each of the cards features a building that was at one time the tallest building on Earth. The cards are dealt so that each child has four cards which they place date side down on the table in front of them.
- The remaining card pile is placed date side down in the middle of the table. The top card is turned to reveal the date that structure was the tallest on Earth. The timeline will form around this card. (Earliest to most recent, left to right).
- Players take it in turns to place cards from their set of four in the timeline. Without revealing the date, they slide the card into the position they think it belongs.
- The card is then turned over. If it has been placed in the correct position the player has managed to get rid of a card from their hand. If it is in the wrong position, then the card is returned to the bottom of the pile and the player takes a new card.
- Play continues until a child manages to successfully place all of their cards in the timeline. Each go must be taken within an allocated time limit, we suggest one minute.



### Taking it further

This resource can stimulate a wide range of cross-curricular learning opportunities that will support thematic learning in the classroom. Here are a few suggestions to get you started:

- **Science** – children can participate in a problem solving, team building challenge to design and construct the tallest tower. They can devise their own simple tests to find out about the strength of materials and how best to construct their tower, a fantastic opportunity to develop working scientifically skills.
- **Maths and science** – the children can work as a class to explore patterns between the height of buildings and when they were built. They can construct block diagrams or pictograms to compare data from the cards and identify patterns and trends.
- **Geography and history** – children can try and locate all of the buildings on a world map. Discuss the purpose of each building and consider what this tells us about what was important to people at different points in history.
- **Art & design** – children can design and model a skyscraper of the future or create city skyline silhouette art.
- **Science capital** – help children develop an awareness of careers that bring together science, maths and creativity. Share the story *Iggy Peck, Architect* to learn about this amazing job. Perhaps an architect could come to visit the class to tell them all about their work.



Credit: Harry N. Abrams 1