The Ogden Trust

making physics matter

Scientific ideas over time

Age 7-11 years

Timeline card sort game - largest planes

Introduction

A simple game for KS2 children who are learning about forces, this game provides the opportunity to apply their new learning to the context of flight. In playing the game, children will develop a historical awareness of how our scientific understanding of forces and flight has enabled engineers to develop larger planes. Children will also develop their mathematical skills in sequencing dates. 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.

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. The cards feature some of the largest aircraft ever constructed and include their mass in tonnes. 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 and placed in front of the pile, revealing a plane and the date it was built. 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.

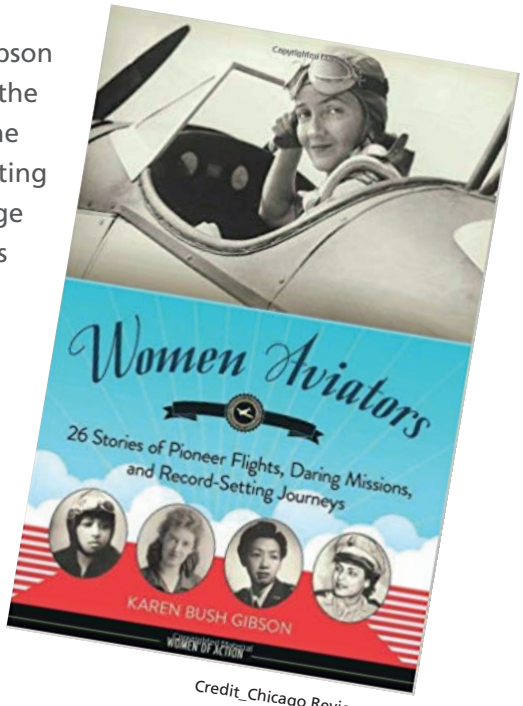
Taking it further

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 investigate paper aeroplanes through a variety of fair and comparative tests. This is a fantastic context through which children can plan and carry out their own enquiries, identifying the variables they will change, measure and control.

- **Maths and science** – the children can convert the masses of the planes into kilograms and then compare the masses of each of the planes with a familiar, heavy object such as an elephant (3,000kg – 3 tonnes) or a double decker bus (12,000kg – 12 tonnes).

- **English and history** – the books *Women Aviators* by Karen Bush Gibson and *The Wright Brothers* by Pamela Duncan Edwards are just two of the fantastic children's books that focus on the biographies of some of the great characters in the history of flight. A wonderful stimulus for writing and exploring historical sources, these books can be used to encourage children to discuss the impact that the invention of the aeroplane has had on society.



Credit_Chicago Review Press 1