

VASHTI  HARDY

DARKWHISPERS

A

BRIGHTSTORM

ADVENTURE



YEAR 5 LESSON PLAN

OUTCOMES

CHILDREN WILL:

- understand how air-ships work
- design their own air-ship prototype
- test and evaluate their prototype
- learn about how air-ship design has changed over time, and its place in the aeronautic industry

CURRICULUM LINKS

DESIGN AND TECHNOLOGY

DESIGN

Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

MAKE

Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately

Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

EVALUATE

Understand how key events and individuals in design and technology have helped shape the world

RESOURCES

Darkwhispers

Resource Sheet One - Air-ships

Resource Sheet Two - Sky-ship Design

Resource Sheet Three - The History of Air-ships

Large plastic bags (such as bin liners)

Paperclips

Hair dryer

String

Materials for children to choose from to create their own sky-ship.

For example, card, paper, dowel, corrugated card, foam board, lollipop sticks, art straws, tissue paper etc.



VASHTI  HARDY

DARKWHISPERS

A

BRIGHTSTORM

ADVENTURE



LEAD IN

Read the description of the house turning into the sky-ship on pages 52–54 of *Darkwhispers*. As you are reading, encourage the children to make quick sketches of what the sky-ship must look like. Copies of the text could be made available to the children to help them remember the most important features, such as shutters, propellers, balustrades and the balloon itself.

Look at ‘Resource Sheet One – Air-ships’ to see pictures of differently designed air-ships through the ages. What do they have in common? What has changed about them as time has gone on? In small groups, the children could discuss which of the pictures they think is most similar to the sky-ship described in *Darkwhispers*, and what led them to that conclusion.

As a class, discuss how hot-air balloons and other air-ships work. The balloon needs to be filled with something that is lighter than the air around it. This may be a different gas (such as helium, which we use in party balloons today) or hot air, as heated air floats because it is lighter than the air around it.

Demonstrate creating a hot-air balloon using a large plastic bag. Tie a string around the base of the plastic bag – this will become the top of the ‘balloon’ and the string will ensure a more even, rounded shape. Place paperclips around the opening of the plastic bag. These provide stability. Repeat with another plastic bag, this time leaving the paperclips off.

Hold the bag over the hair dryer and begin to blow hot air into it using its highest setting. When you feel the bag tugging as it becomes more buoyant, release it to watch it float into the air.

Repeat the process with the other bag so that the children can see the difference that the paperclips make.

TASK

Children work in pairs or small groups to design their own sky-ship. There must be space for people to stand, such as the deck mentioned in the story. They might want to include balustrades for safety, or other features that may be different to the described sky-ship.

Their designs can be drawn on ‘Resource Sheet Two – Sky-ship Design’, and then annotated with the features they have chosen.

Explain that they will make a prototype of their sky-ship. Discuss why making prototypes is an important part of the design process for an engineer. Show children the different materials gathered, including large plastic bags for the balloon. In pairs, children create their design before testing it using the hairdryer to fill the bag with hot air. The different sky-ships could be timed to see how long each one is able to stay airborne.

EXTENSION

Children could research the part that balloons have played in the history of flight. After completing ‘Resource Sheet Three – The History of Air-ships’, children can discuss in small groups whether they think that air-ships will make a comeback. Do they fulfil a role that is different to helicopters or aeroplanes? Are they better for the environment than other flight methods? Would people choose to use them for short distances or long distances?



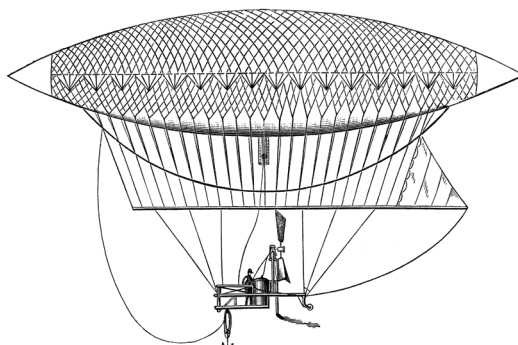
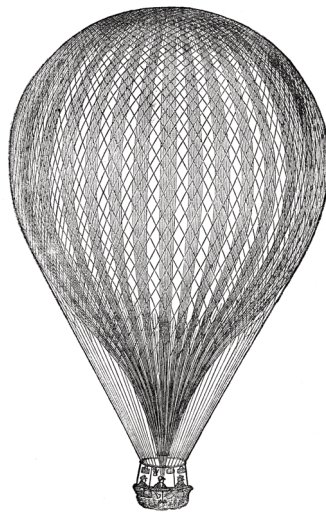
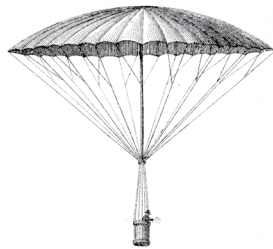
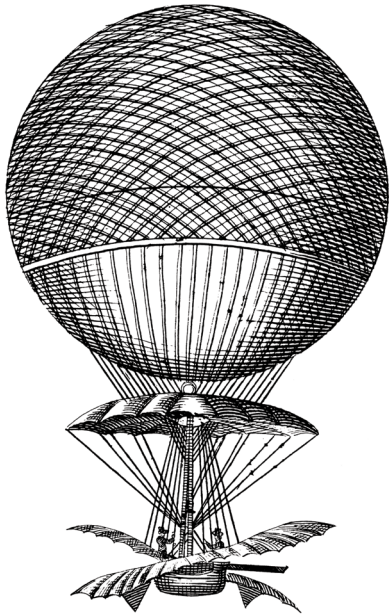
VASHTI  HARDY

DARKWHISPERS

A
BRIGHTSTORM
ADVENTURE



AIR-SHIPS



 SCHOLASTIC

VASHTI  HARDY

DARKWHISPERS

A

BRIGHTSTORM

ADVENTURE



SKY-SHIP DESIGN

Design your own sky-ship. Think about the problems you will need to solve: How will your balloon be filled in real-life? Where will the people stand or sit? How will you protect them from the weather? How will you keep them safe when they are in the air? When you have completed your sketch, annotate it with the different features.



VASHTI  HARDY

DARKWHISPERS

A BRIGHTSTORM ADVENTURE



THE HISTORY OF AIR-SHIPS

Research how air-ships have changed over time. Complete the sheet with your findings.

THE FIRST AIR-SHIPS

.....

.....

.....

.....

NAVIGABLE AIR-SHIPS

ZEPPELINS

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

AIR-SHIPS TODAY

.....

.....

.....

.....



VASHTI  HARDY

DARKWHISPERS

A

BRIGHTSTORM

ADVENTURE



YEAR 6 LESSON PLAN

OUTCOMES

CHILDREN WILL:

- use dictionaries to understand the meaning of key words
- understand the meaning of colonialism, colony and empire
- debate why countries may change their names after independence
- write a balanced argument around the issues of the importance of a name change

CURRICULUM LINKS

ENGLISH

SPOKEN LANGUAGE

- articulate and justify answers, arguments and opinions
- maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments
- use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas

READING

- participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously

SPELLING

- use dictionaries to check the spelling and meaning of words
- use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary

WRITING

- Plan their writing by:
 - i. identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own
 - ii. noting and developing initial ideas, drawing on reading and research where necessary
- Draft and write by:
 - i. using a wide range of devices to build cohesion within and across paragraphs
 - ii. using further organisational and presentational devices to structure text and to guide the reader

RESOURCES

Darkwhispers

Resource Sheet One – The British Empire

Resource Sheet Two – What's in a Name? Make the Change

Resource Sheet Three – What's in a Name? Keep it the Same



VASHTI  HARDY

DARKWHISPERS

A

BRIGHTSTORM

ADVENTURE



LEAD IN

Read the newspaper article from pages 17–18 of *Darkwhispers*. This article states that the three continents will now be known by their official names (Vornatania, Nadvaaryn and the Ice Continent) rather than the First, Second and Third continents in all official documents.

Discuss as a class why this might be important. Does it matter what a place is called? Which group of people do you think would like the change? Which, if any, group of people might dislike the change?

TASK

Introduce the words ‘colonialism’, ‘colony’ and ‘empire’. Does anyone know the meaning of the word? If not, encourage children to find the definition in the dictionary. Show children ‘Resource Sheet One – The British Empire’. Many different countries, including France and Britain, had colonies around the world. When these places gained independence, many changed their country or city names to reflect this. Examples include Ceylon/Sri Lanka, Bombay/Mumbai, Rhodesia/Zimbabwe.

Ask the children to imagine that they live in a country which has just become independent after many years of being controlled by a different place far away, and the most important people living in your land were those who do not originally come from your country.

Using ‘Resource Sheet Two – What’s in a Name? Make the Change’ and ‘Resource Sheet Three – What’s in a Name? Keep it the Same’, children can choose their point of view and raise ideas to justify their opinion. If there is time, the class could split into two groups and have a debate over whether to change their country’s name or keep it the same.

EXTENSION

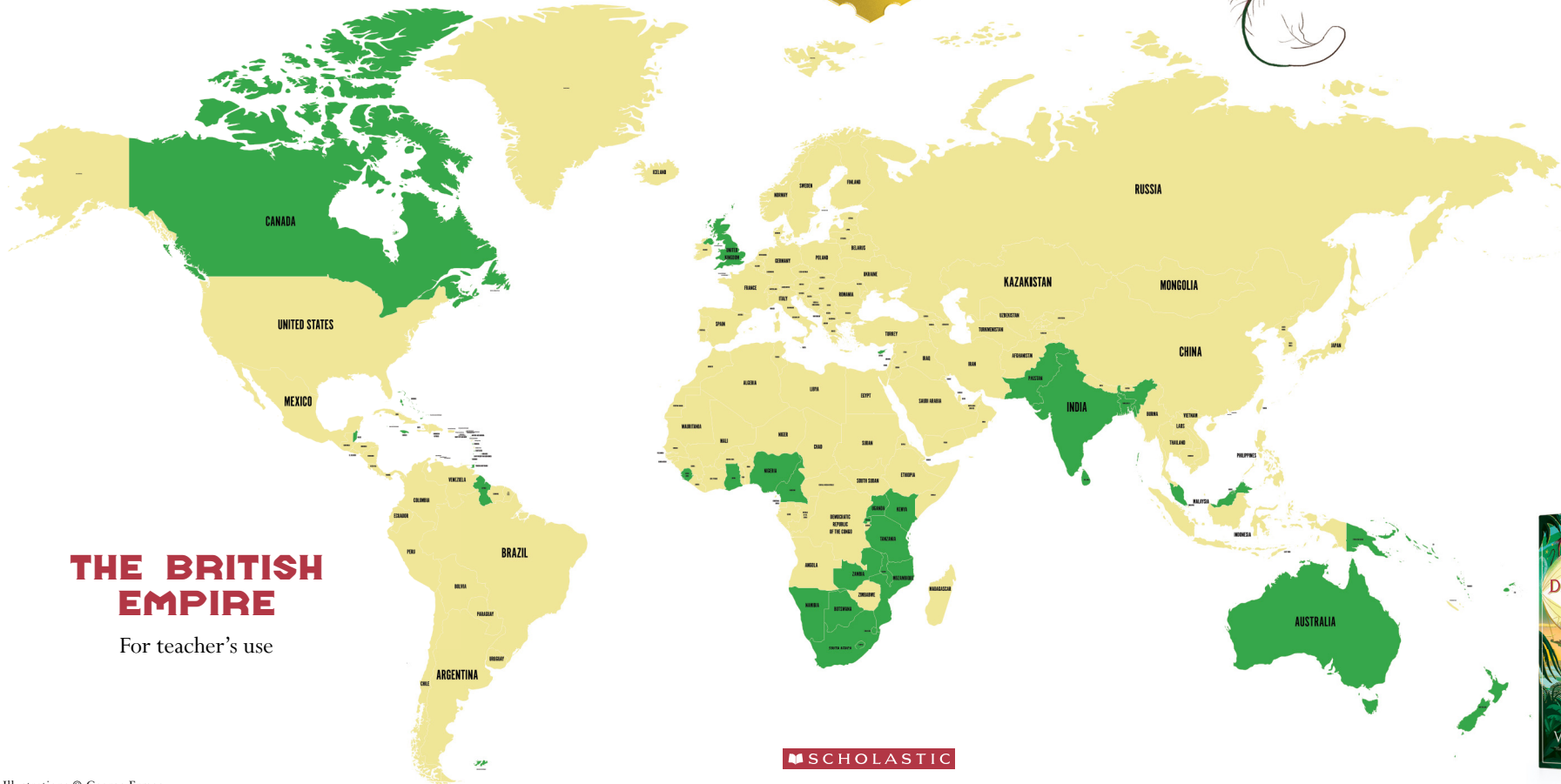
Using the ideas gathered from Resource Sheet Two and Three, and also from the debate if the class have held one, children write a balanced argument explaining the two sides. In their conclusion, they should declare which they believe is correct and why.



VASHTI  HARDY

DARKWHISPERS

A BRIGHTSTORM ADVENTURE



THE BRITISH EMPIRE

For teacher's use

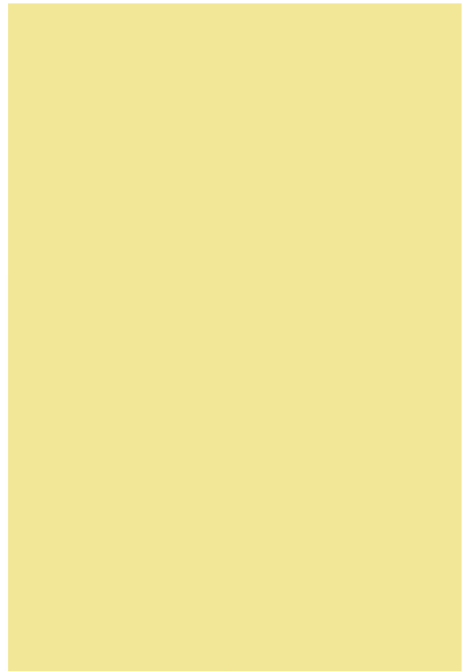


 SCHOLASTIC

VASHTI  HARDY

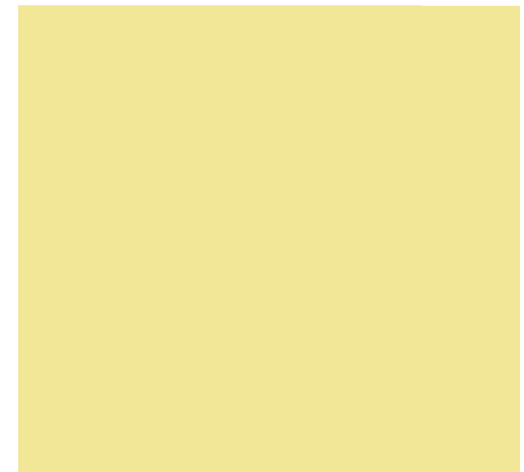
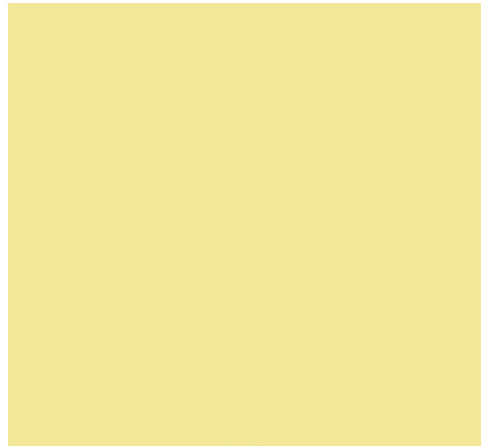
DARKWHISPERS

A BRIGHTSTORM ADVENTURE



**WHAT'S IN
A NAME?
MAKE THE
CHANGE**

Why should we change
the name of our newly
independent country?
Fill in the placards with
your ideas.



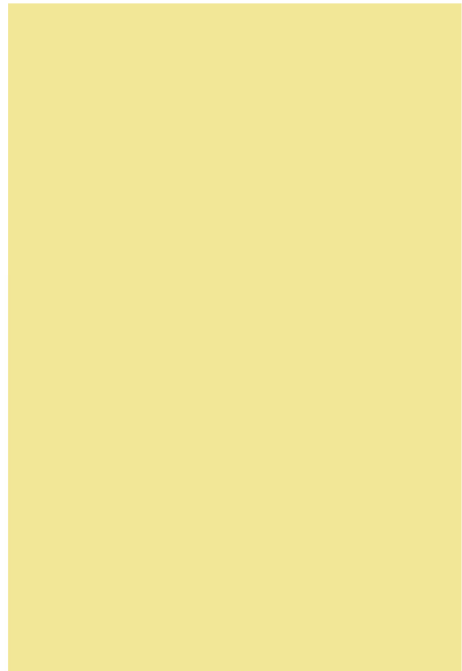
 SCHOLASTIC



VASHTI  HARDY

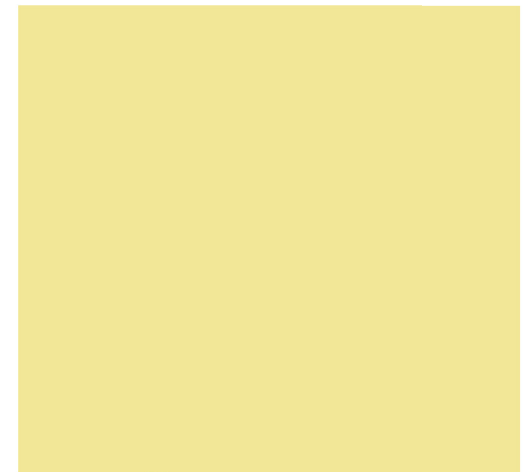
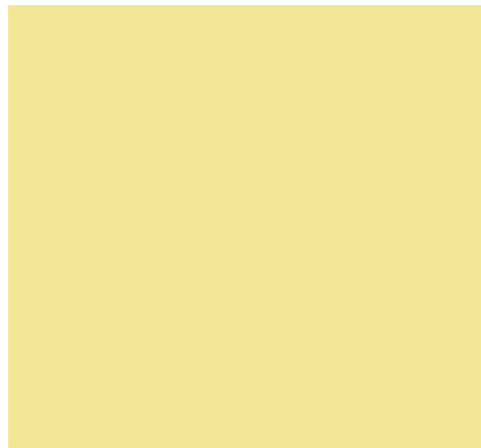
DARKWHISPERS

A BRIGHTSTORM ADVENTURE



**WHAT'S IN
A NAME?
KEEP IT
THE SAME**

Why should we keep
the name of our country
now that we have
independence? Fill in the
placards with your ideas.



 SCHOLASTIC

