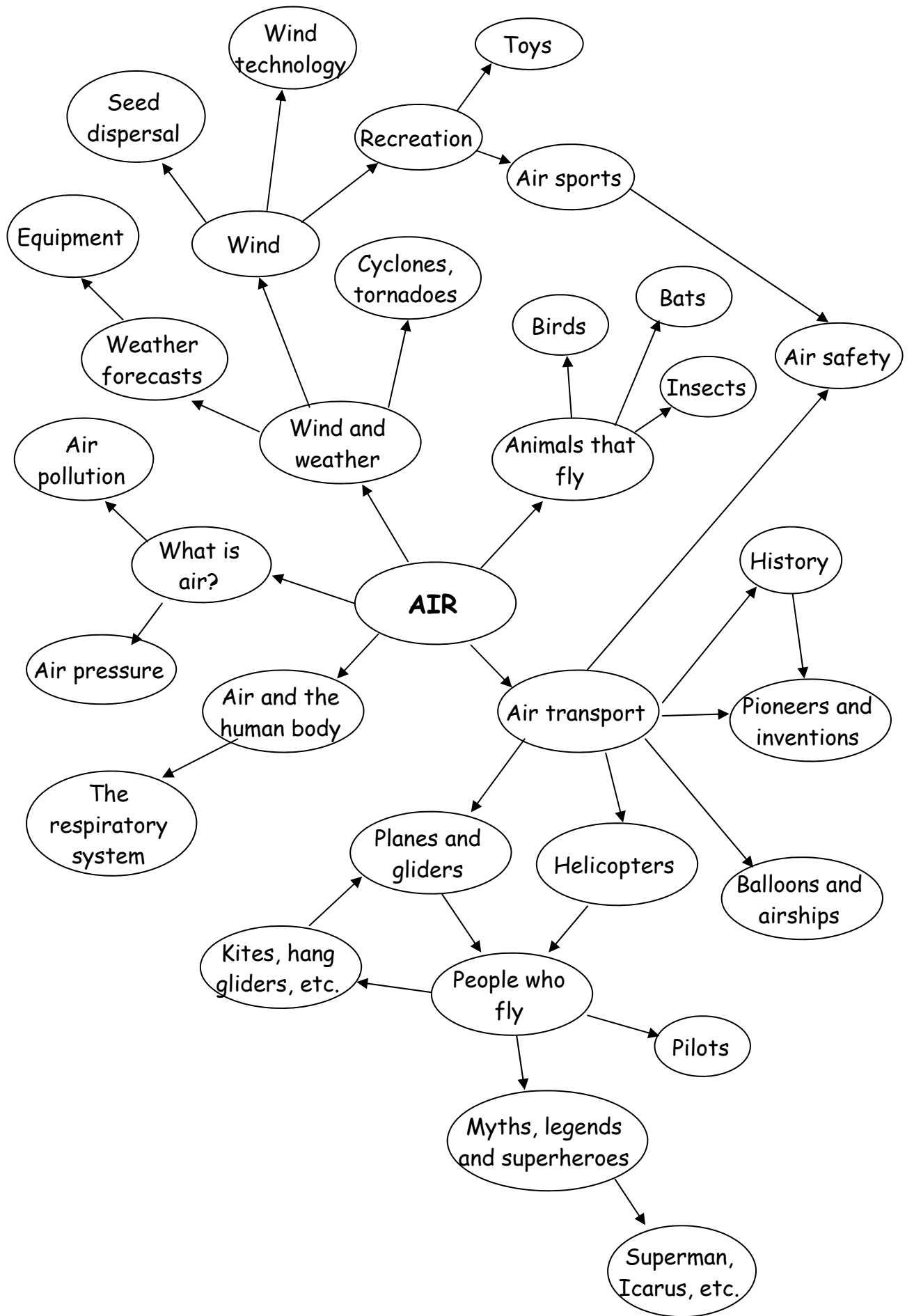


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Task cards master chart

Card	Task title	Gardner	Bloom	Student response sheet	Information page
1	Word building: wind words	L	1		
2	Make a crossword puzzle	L, S	1	2 Grid sheet	
3	Make an air word search	L, S	1	2 Grid sheet	
4	Research cyclones	L	2	16 Data chart	
5	Investigate the respiratory system	BK	3	3 The respiratory system	1 How we breathe
6	Write and draw a comic strip	L	3		2 The story of Pegasus
7	Research how hovercraft work	L	2	4 Hovercraft	40 How a hovercraft works
8	Write fiction based on facts	L	3		3 The first hot air balloon
9	Make a paper windmill	S, LM	3		4 Make a paper windmill
10	Write a news report	L	3	5 Notes for a news report	5 How to write a news report
11	Write a news report about Hargrave	L	3	5 Notes for a news report	5 How to write a news report 6 About Lawrence Hargrave
12	Arguments for and against fossil fuels	L	5		
13	Make an anemometer	S, LM	3		7 Make an anemometer
14	Observe wind strength	S, LM	3		
15	Make a barometer	S, LM	3		8 How to make a barometer
16	Make a windsock	S, LM	3		9 Making a windsock
17	Make a parachute	S, LM	3	1 Science report	10 Making a parachute
18	Investigate airships & hot air balloons	LM	4		11 Constructing timelines
19	Looking at weather maps	LM	4	6 Understanding weather maps	12 Reading weather maps
20	Experiment to investigate power of air	LM	4	1 Science report	13 The power of air
21	Measure lung capacity	LM	1	2 Grid sheet	
22	Construct an air transport timeline	S, LM	2		11 Constructing timelines
23	Make an illustrated list	S	1		
24	Make an illustrated list and mobile	S	3		14 Ideas for mobiles
25	Make & test paper gliders	LM	5	1 Science report	15 Folding paper gliders
26	Make and fly a simple kite	S	3	1 Science report	16 Making a simple kite
27	Research how birds fly	L, N	2	7 How birds fly	17 How birds fly
28	Design stamps about air transport	S	3		
29	Make & test gyrocopters	LM	5	1 Science report	18 Making gyrocopters
30	Write and perform a play	L, BK	4		19 The north wind and the sun 29 How to write a play
31	Experiment to show air pressure	LM	3	1 Science report	
32	Experiment to show air takes up space	LM	3	1 Science report	20 Air takes up space
33	Make a paper rotocopter	LM	3	1 Science report	8 Making a paper rotocopter
34	Experiment to observe air pressure	LM	3	1 Science report	
35	Experiment to show air has weight	LM	3	9 Air has weight	
36	Experiment to show air fills all spaces	LM	3	1 Science report	21 Air fills space
37	Make an aerofoil	LM	3	1 Science report	22 Make an aerofoil

Card	Task title	Gardner	Bloom	Student Response Sheet	Information Page
38	Experiment to show effects of air pressure	LM	3	1 Science report	
39	Research how hot air balloons fly	L	2	16 Data chart	23 Parts of a hot-air balloon
40	Research how an aeroplane flies	L	3	10 How an aeroplane flies	24 How aeroplanes fly
41	Make a mini-book	L	2		19 The North Wind & the Sun 25 Making a mini-book
42	Make a model helicopter	S	3		
43	Make a model aeroplane	S	3		
44	Write a rap to retell a story	M	3		26 How to write a rap 19 The North Wind & the Sun
45	Experiment to show air pressure	S, LM	3	1 Science report	
46	Record topic sounds	M	3		
47	Make a diorama: The Story of Pegasus	S	3		2 The story of Pegasus
48	Investigate breathing through the nostrils	L, LM	2	11 Breathing through your nostrils	1 How we breathe
49	Write and perform a play	L	4		2 The Story of Pegasus 29 How to write a play
50	Plan a debate about wind farms	L	4		28 Rules of debate
51	Write a glossary	L	1		
52	Research wind farms	L	3	16 Data chart	
53	Make a model wind turbine	L	3		27 Wind turbines
54	The effects of wind on people's lives	L	3		
55	Debate wind energy as power source	L	5		28 Rules of debate
56	Create a new wind power vehicle	S	6		
57	Make an illustrated list of air transport	L	1		
58	Write a news report about the Wright brothers	L	3	5 Notes for a news report	5 How to write a news report
59	Debate: Air travellers should off-set emissions	L	5		28 Rules of debate
60	Invent an environmentally friendly flying machine	LM	6		
61	Make a chart of animals that fly	L, N	1		
62	Make an illustrated list of wing types	S, N	2		
63	Make a mobile of flying animals	S, N	3		14 Ideas for mobiles
64	Write a play or song about clean air	M	6		29 How to write a play
65	Make up a quiz about animals that fly	N	4		
66	Choose to be a flying animal	L	5		
67	Invent a flying machine	S, N	6		
68	Write and perform a play	L, BK	6		29 How to write a play
69	Create and perform a dance	BK	6		38 Elements of dance
70	Make a poster about wings	N, L	2		
71	Research windmills	M	6		

Card	Task title	Gardner	Bloom	Student Response Sheet	Information Page
72	Write a records book: Amazing animals	L, N	3		25 Making a mini-book
73	Make a 'Fish' card-game	LM	3		
74	Make a 'concentration' card game	LM	3		
75	Write a song about a bird	M, N	3		
76	Write a song about a flying animal	M, N	3		
77	Make an A–Z list	L	2	12 Make an A–Z list	
78	Write a cinquain poem	L	3		34 Poetry formats
79	Write an acrostic	L	3		34 Poetry formats
80	Recount: My trip in a hot-air balloon	L	3	13 Notes for a recount	
81	Write an ad. jingle for a new airline	L, M	3		
82	Research for a quiz about seed dispersal	N, LM	2		
83	Make a model windmill	S	3		
84	Make and test land yachts	S, LM	5		30 Make land yachts
85	Investigate air quality	S, LM	3		
86	Give a talk: Causes and effects of air pollution	N, L	3		33 Causes and effects of air pollution
87	Make a poster of flying animal expressions	S	3		
88	Perform a play: The story of Icarus	BK	6		31 The Story of Icarus
89	Present a talk about how helicopters fly	L	3		32 How a helicopter flies
90	Create and perform a dance about flying insects	BK	6		38 Elements of dance
91	Conduct a survey about a popular air sport	LM	4		
92	Compare a helicopter & jet liner	S	4	14 Venn diagram	
93	Compare the Wright Bros. & L. Hargrave	S	4	14 Venn diagram	6 About Lawrence Hargrave
94	Recount: The day I was the pilot	L	2	13 Notes for recount	
95	Make an air-propelled boat	LM	3	1 Science report	35 Make an air-propelled boat
96	Make and fly a diamond kite	S	3		36 Make and fly a diamond kite
97	Draw and write a comic strip	L, S	3		37 Travelling overseas by plane
98	Write and perform a play	BK	6		37 Travelling overseas by plane 29 How to write a play
99	Illustrate air words	L	6		
100	Wind-powered transport around the world	S	3	15 A world map	

AIR

ABC

Bloom 1

Task card

1

TASK Build a list of wind words

How many words can you find that have the word 'wind' as part of them?

For example: *windy, woodwind*

Make a list of wind words and draw pictures to illustrate each one.

You can use a dictionary to help you.

You will need:
dictionary

pen and art paper

coloured pencils or felt pens

AIR

60

Bloom 6

Task card

2

TASK Make up a crossword puzzle

1. Make a list of words about air.
2. Put words from your list onto Student Response Sheet 2 so that they interlock.
3. Remember to colour in the squares where no letters are to be written. This will become the answer sheet.
4. On a second grid sheet, copy the puzzle without writing in the words. Just number where each word starts and colour in the squares where no letters are to be written.
5. Write the clues for the puzzle.
6. Give the puzzle to someone to solve, or make copies for your group.

You will need:
your word list

2 copies of Student Response Sheet 2: *Grid sheet*
pen and paper
dictionary

Note: You could also produce a crossword puzzle using computer software.

TASK Make up a wordsearch using words about air

1. Make a list of words about air.
2. Write the words onto a copy of Student Response Sheet 2: *Grid sheet*. Write them across, down and diagonally.
3. Fill any gaps with different letters of the alphabet. Try to make the spare letters spell out a word related to air.
4. Give the wordsearch to someone to solve, or make copies for your group.

You will need:
your word list

Student Response Sheet 2: *Grid sheet*

pen and paper
dictionary

TASK Researching cyclones

1. Go online to www.kidcyber.com.au/topics/cyclonetornado.htm
2. Read the information and write a description of a cyclone. Make sure your description answers these questions:
 - a. What is a cyclone?
 - b. Where do cyclones start?
 - c. What happens in a cyclone?
 - d. Who tells us that a cyclone is on its way?
3. Use Student Response Sheet 16: *Data chart* to organise your report.
4. Write and illustrate your description.

You will need:
computer access to the internet
pen and paper

Student Response Sheet 40: *Data chart*

You will need:

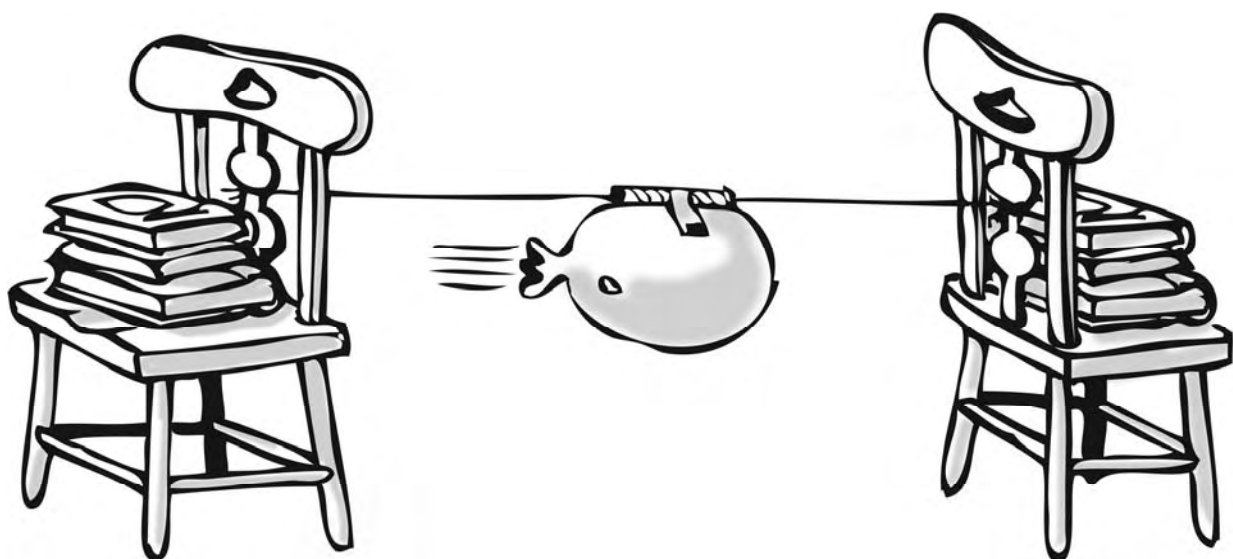
fishing line (approx. 6 metres long)

balloons

a drinking straw

sticky tape

1. Place two chairs back-to-back and 6 metres apart. Weigh down the seats with heavy books or so they don't tip over (see diagram).
2. Thread a straw on the fishing line, tie the fishing line between the chair backs, stretching it tightly, but making sure one end of the fishing line can be untied and re-tied easily.
3. Blow up a balloon, hold the end closed and have someone tape its fattest part to the drinking straw.
4. Slide the straw along so the balloon is against one chair back and let go. The straw, with the balloon attached, will travel along the string. Measure how far it travels.
5. Experiment to find out if this balloon travels better if you blow it up half or quarter full, and if different shaped or sized balloons work differently.
6. Use Student Response Sheet 1 to write a report.



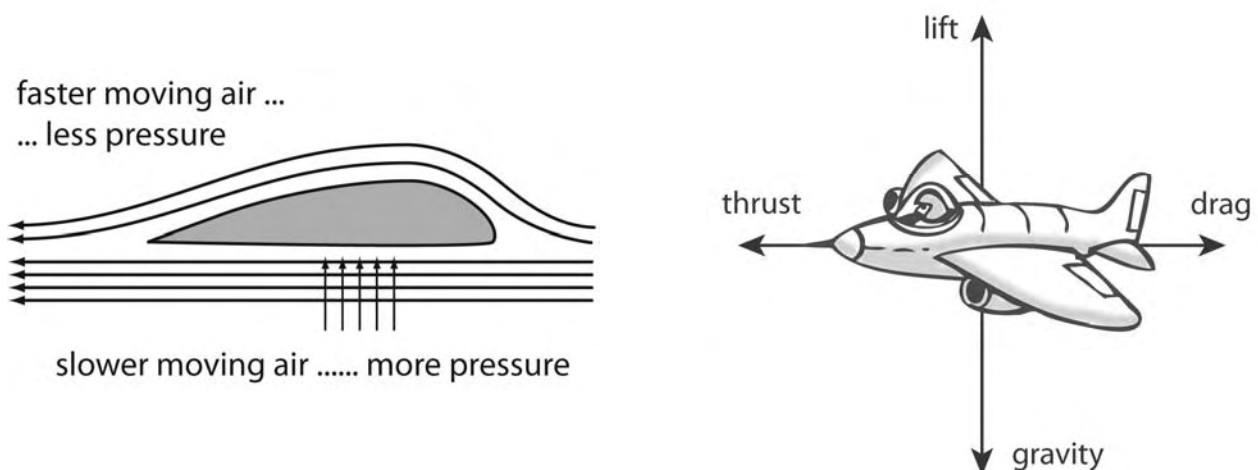
AIR: How aeroplanes fly

An aeroplane flies because the air moving over and under all parts of it, particularly the wings, travels at different speeds.

Four forces affect an aeroplane: thrust, drag, gravity and lift.

To take off and keep flying, powerful engines drive the plane forward giving it **thrust**. The aeroplane's thrust must be greater than the effect of **drag**. Drag is the force of the air against the plane as it travels through it. Drag is kept low by the sleek, aerodynamic shape of the plane's wings, which allows the plane to slip through the air.

To rise into the air, and overcome the force of **gravity**, the plane needs a force called **lift**. The air passing over the curved top surface of the wing has to move faster than the air passing underneath it. The fast moving air creates an area of lower air pressure above the wing and the plane is pulled up. At the same time, the slow moving air under the wing creates an area of high pressure, which pushes the plane up from below. Lift must be greater than the force of the Earth's gravity that pulls the plane down to the Earth's surface.



What about landing?

The pilot slows the engines to reduce thrust and drag. The air pressure above and below the wings begins to even out reducing lift, and the Earth's gravity pulls the plane towards the ground.