

## **Thinking Skills**

### **Intent**

Yardley aims to teach its pupils a range of skills and strategies so that they can reason (verbally and non-verbally), think creatively, think systematically and problem solve. They develop resilience and have a positive attitude to challenge. They understand the process of learning (metacognition). They can apply these skills across the curriculum. They are aware of growth mindset, assessment for learning and habits of mind and how these can help them with their learning.

Pupils have good mental wellbeing. They are taught how to recognize their own emotions and how to effectively manage these. They can recognize other people's emotions and have the communication skills to interact with others appropriately.

Our Thinking Skills Curriculum is concerned with the development of pupil skills in the following areas:

### **Information processing skills-**

- locate and collect relevant information
- sort
- classify
- sequence
- compare and contrast
- analyse part-whole relationships

### **Reasoning skills-**

- give reasons for opinions and actions
- draw inferences and make deductions
- use precise language
- explain what is thought
- make judgements and decisions informed by reasons or evidence

### **Enquiry skills-**

- ask relevant questions
- pose and define problems
- plan what to do and how to research
- predict outcomes and anticipate consequences
- test conclusions and improve ideas

### **Creative thinking skills-**

- generate and extend ideas
- suggest hypotheses
- apply imagination
- look to innovative outcomes

### **Evaluation skills-**

- evaluate information
- judge the value of what is seen, heard and done
- develop criteria for judging the value of own and others ideas
- have confidence in their judgements

The scheme of work consists of activities that are progressively more challenging and demanding of higher skills. Illustrated by year group it constitutes a continuum from which teachers choose tasks to develop their pupils thinking skills.

<b>YEAR 1</b>			
<b>Week No.</b>	<b>Learning Objective:</b> <i>Activity, book and page number</i>	<b>Area of learning:</b> <i>Information processing, reasoning, enquiry, creative thinking &amp; evaluation skills</i>	<b>Duration of lesson:</b>
1	Create Characters using paint splodges (Beautiful oops – whole book as example). Create a story and setting for characters (Layered landscape)	Creative: Generate and extend ideas.  Look to innovate outcomes	30mins  30 mins
2	Ask children to research people who have, first failed and then gone on to achieve. (Jessica Ennis, Nelson Mandela) Children bring in picture for show and tell.  Ask children to think about when they have failed and then learnt from this (Picture). Riding bike, improving number bonds (Growth mind set pocket book Pg.28)	Information processing skills: Locate and collect relevant information.  Compare and contrast (with their own experience).	30mins  30mins
3	Discuss ideas for a new playground. Narrow ideas down to top ten as a class. Create a questionnaire and use tally chart to log own and neighbours classes choices.  In MA Groups create a presentation with picture, costing and supporting argument for chosen layout. (Pie charts?)  Based on Redesign your classroom in (Thinking Skills 8-10 Pg.37)	Evaluation skills. Judge the value of what is seen heard and done. Develop criteria for judging the value of own and others ideas.  Reasoning skills: Give reasons for opinions and actions. Make judgements informed by evidence.	30mins  30mins
4	Imagine That- Cut up magazines to make a new person.	Creative, Information	60mins

	<p>Cut up words. Put them in categories and use the categories for recall. (Based on Making it different in Thinking Skills 8-10 Pg.47)</p>	processing and Reasoning skills	
5	<p>Ani-fruits Make a new creature that is a mix of a fruit and an animal. Explain why and how they mixed the animal and the fruit. (Based on Making it different in Thinking Skills 8-10 Pg.47)</p> <p>Alphabet animals Find names for each letter Use books for research Try to make the letter look like an animal.  (Based on Alphabet Doodles in Creative Thinking 6-8 Pg.27)</p>	Creative, Enquiry and reasoning skills	<p>30mins</p> <p>30mins</p>
6	<p>Predicting the future What children might wear in 100 years What everyone will be doing in 20 years from now? How children would travel to school? Discuss as a class, write about it as a group and do individual pictures.  Each group presents their pictures and others evaluate.  (Based on What if? Questions in Growth mind set pocket book Pg.94)</p>	Information processing, Enquiry, Reasoning, Evaluation and Creative skills	<p>10mins discussion</p> <p>30mins writing and drawing</p> <p>20mins presenting and evaluating</p>
7	<p>Design a “working” satellite using recycled materials. Include the different parts: container, power source, scientific instruments, communication device, and orientation finder.  Present and evaluate satellites.  <a href="https://spaceplace.nasa.gov/build-a-spacecraft/en/">https://spaceplace.nasa.gov/build-a-spacecraft/en/</a></p>	Creative, reasoning, information processing, evaluation skills	<p>45mins</p> <p>15mins</p>
8	<p>Play Odd One Out  Finding Categories Using the 5 S (sound, smell, sense, size and speciality) strategy to sort a series of objects. (Thinking Skills 8-10 Pg.41)</p>	Information processing and Reasoning skills	<p>15mins</p> <p>45mins</p>
9	<p>Tallest Tower Challenge In pairs, roll a 1-6. The number shown on the dice is the number of lego ‘bumps’ that must be covered by the next brick in the tower, ie 4 on the dice = 4 parts of the brick must join. (only exception is 5 – children can choose to join 4 or 6). The aim is to build the tallest</p>	Creative, Reasoning and Evaluation	60mins

	<p>freestanding tower (1 brick on top of each other) by thinking strategically about the placement of each brick so it stays stable and doesn't topple over.</p> <p>(Based on The Tallest Tower in Creative Thinking 6-8 Pg.47)</p>		
10	<p>If you're on a plane and it crashes on a desert island. What items would you take? Why?</p> <p>If your plane crashes and you land in the North Pole, what would take and why?</p> <p>Share answers and compare and contrast the answers for the two places.</p> <p>(Based on What if? Questions in Growth mind set pocket book Pg.94)</p>	<p>Information processing, Enquiry, Reasoning, Evaluation and Creative skills</p>	<p>30mins</p> <p>30mins</p>
11	<p>Crossing the River</p> <p>Two hoops represent boats, five kids need to always stay in the boat, how do you get across the river?</p> <p>Grannies Garden on iPads</p>	<p>Reasoning, Enquiry, Creative and Evaluation skills</p>	<p>35mins</p> <p>25mins</p>
12	<p>Time Capsule – Choosing 10 personal items that use each of the senses to put in a time capsule and explain why it was chosen.</p> <p>Write a message explaining what the year is like.</p> <p>(Thinking Skills 8-10 Pg.36)</p>	<p>Reasoning and Evaluation Skills</p> <p>Information processing skills</p>	<p>30mins</p> <p>30mins</p>
13	<p>Use 2D and 3D shapes to build a new invention.</p> <p>Present and explain what the new invention is and what it does.</p> <p>Peer assessment to evaluate the new inventions.</p> <p>(Thinking Skills 8-10 Pg.35)</p>	<p>Creative and reasoning skills</p> <p>Reasoning skills</p> <p>Evaluation skills</p>	<p>25mins</p> <p>20mins</p> <p>15mins</p>
14	<p>Draw a character. With a partner, use only adjectives to describe your character. Your partner needs to draw your character as accurately as possible.</p> <p>Compare the two drawings. Discuss similarities and differences. Why do you think the drawings are different?</p> <p>(Based on Character Sketch in Thinking Skills 8-10 Pg.43)</p> <p>Draw a part of a person, fold the paper and pass the paper over to the next person to draw the next body part. Do it until a full person is drawn. Reveal the picture and evaluate.</p>	<p>Creative skills</p> <p>Evaluation skills</p>	<p>30mins</p> <p>10mins</p> <p>20mins</p>

		Creative, Reasoning and Evaluation skills	
15	<p>Make up a secret message using pictures/shapes/animals. The first letter for each is used to make a sentence.</p> <p>Exchange codes with a partner. Find the secret message and evaluate the secret code. (Based on Code It in Thinking Skills 8-10 Pg.47)</p>	<p>Information Processing skills</p> <p>Evaluation skills</p>	<p>40mins</p> <p>20mins</p>
16	<p>Knowledge Quiz</p> <p>In groups, to complete a quiz about things they learnt this year.</p> <p>Categories: English/Stories General Knowledge Science</p>	Information Processing skills	60mins
17	<p>Creative Musical Drawing</p> <p>Play a piece of instrumental music. Children are encouraged to close their eyes while listening carefully. While listening to it again, children are to draw a picture based on their experience. Encourage them to be as realistic or abstract as they want. Discuss drawings.</p>	Creative skills	60mins

YEAR 2			
Week No.	Learning Objective: <i>Activity, book and page number. Break down of the LO</i>	Area of learning: <i>Information processing, reasoning, enquiry, creative thinking &amp; evaluation skills</i>	Duration of lesson:
1	<i>Look at this picture (house on fire) – What is happening? What can we suggest? What should they do?</i> Main: <b>Thinking skills – 6 – 8 The Old Fire Engine p25 – How can the parts be used?</b>	Enquiry skills	1 hour
2	<b>Starter:</b> To generate and extend ideas - <i>Why do people write in straight lines? Creative thinking 6-8 p 25</i>  <b>Main activity:</b> <i>– Every picture tells the story linking this activity to literacy skills</i> <b>Creative thinking 6-8 p 29</b>	Creative thinking skills  <i>creative thinking &amp; evaluation skills</i>	1 hour
3	<b>Starter questions –</b> To develop skills to hypothesise. <i>We can't do PE outside because it is raining and the hall is in use, what can we do?</i>	reasoning, enquiry, creative thinking & evaluation skills	1 hour
4	<b>Starter questions –</b> What if questions – PS Imagine waking up in the morning and find that you have grown 1m at night. What will happen? How will it effect? What will you do?	reasoning, enquiry, creative thinking & evaluation skills	1 hour
5	<b>Making a swing</b> Give children a variety of materials – which would be good to make a swing (why/why not?) How can they be attached together? See if children can successfully make a swing strong enough to hold a small Lego figure. Look at swings/pictures of swings to see how components joined together. Keep questioning and encouraging children to question – is the swing able to stand up? Compare other swings - we learn by helping each other. Could design and make other structures – picnic table/climbing frame.	Reasoning, creative thinking and evaluation skills	1 hour

	Book - Thinking skills – Georgie Beasley p46		
6	<p><b>Activity – What could it be?</b>  <b>Thinking skills 6 – 8 p16 and 18</b>  This is the answer – what is the question? Can relate this to any subject/topic. Could give children a list of answers to include. Can do this for a story – see if they can find story/topic related to those answers. Work together in a group.  Can the children work out other groups questions/answers</p>	Enquiry , creative thinking	1 hour
7	<p>Presents - Talk about when we give presents/what for? How we choose those presents – selection of gifts – who would they be suitable for/why? How do we wrap them? – newspaper/wrapping paper – have a selection of paper/tags/bows/stickers/certificates – some nice/tatty/old/new  Give children pens/white sticky labels – how can they create a message that conveys ‘well done’.  Can they wrap a present suitable for a specific person/event – why did they choose gift/paper etc.  Book - Thinking skills – Georgie Beasley p99</p>	Creative, reasoning	1 Hour
8	<p>To identify similarities and differences between materials/objects. To classify and match objects. To structure their thinking in order to aid their memories.  Set up a series of objects for the children to remember in order. Discuss how they could sort/classify things in order to help with this – material they are made from/room in the house they would go in/country/religion – see if they can come up with any criteria. (cover objects) Then see if they can draw their ‘conveyor belt.’ Ask questions – describe object by different properties – can they find right object. Can they then take a turn to describe objects for others to find.  Book - Thinking skills – Georgie Beasley p21</p>	Information processing	1 hour
9	<p>Thinking skills 6 – 8 p. 27  Activity – The Pink shirt  To think about excuse why you can’t wear the shirt ( birthday present)  Invent 5 ways of using the shirt instead of wearing it.</p>	Creative, reasoning	1 hour
10	<p><b>Thinking skills 6 – 8 p. 27</b>  <i>Activity - Change the Chair using BAR system.</i></p>	Creative, reasoning	1 hour
11	<p><b>Out of the box 5 – 7 p. 21</b>  <i>Activity – A very dangerous place .</i></p>	reasoning, enquiry, creative thinking & <i>evaluation skills</i>	1 hour
12	<p><b>Out of the box 5 – 7 p. 51</b>  <i>Activity – Perry’s pizzas</i>  <i>To design keys for pizza topping.</i></p>	reasoning, enquiry, creative thinking &	1 hour



13	<b>Out of the box 5 – 7 p. 61</b> <i>Activity – looking for clues</i>	reasoning, enquiry, creative thinking & <i>evaluation skills</i>	1 hour
14	<b>Creative thinking 6-8 p. 30</b> <i>Activity – Flashbacks</i>	reasoning, enquiry, creative thinking	1 hour
15	<b>Creative thinking 6-8 p. 30</b> <i>Activity – The new dance craze</i>	reasoning, enquiry, creative thinking & <i>evaluation skills</i>	1 hour
16	<b>Creative thinking 6-8 p. 32</b> <i>Activity – The sound Garden</i> <i>To design a garden for visually impaired</i>	reasoning, enquiry, creative thinking & <i>evaluation skills</i>	1 hour

	<b>YEAR 3</b>		
<b>Week No.</b>	<b>Learning Objective:</b> <i>Activity, book and page number. Break down of the LO</i>	<b>Area of learning:</b> <i>Information processing, reasoning, enquiry, creative thinking &amp; evaluation skills</i>	<b>Duration of lesson:</b>
1	<u>Thinking skills (6-8), Ideas To Go</u> - What Did You See Today - p18 To sequence thoughts in chronological order using memory thinking in logical order of a day's events.	Information processing	1 hour
2	<u>Creative Thinking (ages 6-8)</u> Dance Craze – p31 To sequence dance moves, stating number of times for each to be repeated.	Information processing	1 hour
3	<u>Creative Thinking (ages 6-8)</u> Ent. Estimates – p14 To be able to estimate a variety of sizes, distances, etc using reasoning skills and previous knowledge of quantities.	Information processing	1 hour
4	<u>Creative Thinking (ages 6-8)</u> The Ant Colony - p18 To be able to estimate, strategize and check theories.	Information processing	1 hour
5	<u>Creative Thinking (ages 6-8)</u> Mirrors – p19 To make predictions on how objects will distort in a variety of mirrors.	Information processing	1 hour
6	<u>Creative Thinking (ages 6-8)</u> Picture tells a story – p29 To respond to a visual image and make deductions from what can be seen.	Information processing	1 hour
7	<u>Creative Thinking (ages 6-8)</u> Animal Band – p33 To sequence sounds in patterns, to create a musical performance using only voice.	Information processing	1 hour
8	<u>Inspirational ideas, Outside The Box</u> Lenny the Liar - p39 To find clues to prove that Lenny is lying, connecting this to his written account.	Enquiry skills	1 hour
9	<u>Inspirational ideas, Outside The Box</u> Design a Superhero – p15 To understand that a superhero should have special powers which allow him/her to help others.	Enquiry skills	1 hour
10	<u>Inspirational ideas, Outside The Box</u> Bottle Trap – p17 To know how to trap something/someone without harming them. To be able to think of a design which will succeed.	Enquiry skills	1 hour
11	<u>Inspirational ideas, Outside The Box</u> Land Of Crittle – p27	Enquiry skills	1 hour

	To show understanding and questioning skills to enable explaining why a creature may be either helpful, dangerous or entertaining.		
12	<u>Thinking skills (6-8), Ideas To Go</u> Paper clips - p19 To generate and extend ideas about how to use a paper clip for jobs other than what it was made for.	Creative thinking	1 hour
13	<u>Thinking skills (6-8), Ideas To Go</u> Playing Games - p21 To apply the imagination to generating ideas as to what could be done when playing with a tyre (whole or in pieces).	Creative thinking	1 hour
14	<u>Thinking skills (6-8), Ideas To Go</u> Make A Picture - p22 To apply the imagination to images and what can be created from them.	Creative thinking	1 hour
15	<u>Thinking skills (6-8), Ideas To Go</u> A Piece Of String - p24 To apply the imagination and generate/extend ideas.	Creative thinking	1 hour
16	<u>Thinking skills (6-8), Ideas To Go</u> Toothpick Tricks – p39 To generate ideas and look for innovative outcomes for using 6 toothpicks to create pictures.	Creative thinking	1 hour
17	<u>Creative Thinking (ages 6-8)</u> Alphabet Doodles – p27 To apply the imagination and generate a variety of responses to the letters of the alphabet and the images each letter conjures up.	Creative thinking	1 hour
18	<u>Inspirational ideas, Outside The Box (age 5-7)</u> Stylish Room – p9 To use imagination and prior knowledge from a variety of sources (e.g. magazines) to create a 'stylish' design for a room.	Creative thinking	1 hour
19	<u>Inspirational ideas, Outside The Box (age 5-7)</u> Cuckoo Clock – p13 To understand why a cuckoo clock makes a noise every hour. To generate different ideas about how the clock could gain your attention, without cuckooing.	Creative thinking	1 hour
20	<u>Thinking skills (6-8), Ideas To Go</u> The Pink Shirt - p27 To generate different reasons to not be able to wear the shirt. To generate different uses for the shirt, other than just wearing it.	Reasoning skills	1 hour
21	<u>Thinking skills (6-8), Ideas To Go</u> What a Face - p29 To sort faces into categories and be able to reason why the groups have been chosen and the faces fit into the groups.	Reasoning skills	1 hour
22	<u>Inspirational ideas, Outside The Box (5-7)</u> Dangerous Place – p21 To generate ideas/reasons for how a path may become dangerous. (use cues in thought bubbles').	Reasoning skills	1 hour

23	<u>Inspirational ideas, Outside The Box (7-9)</u> Murder Mystery – p 49 To deduce answers using clues given, sorting and collating ideas.	Reasoning skills	1 hour
24	<u>Inspirational ideas, Outside The Box (7-9)</u> Who lives Here? – p 51 To collate clues to discern which people live in the house.	Reasoning skills	1 hour
25	<u>Inspirational ideas, Outside The Box (7-9)</u> Pedestrian Crossing – p 53 To use information presented on a map to make decisions about crossings and where they will be put. To consider routes to school and number of children crossing at each place.	Reasoning skills	1 hour
26	<u>Inspirational ideas, Outside The Box (5-7)</u> <ul style="list-style-type: none"> <li>- Amazing Tree – p19</li> <li>- Queen Hiltons Castle – p23</li> </ul>	Evaluation skills	1 hour
27	<u>Inspirational ideas, Outside The Box (7-9)</u> A Really Treasured Island – p 57 To make judgements using information seen and be confident in their judgements.	Evaluation skills	1 hour
28	<u>Inspirational ideas, Outside The Box (7-9)</u> Playtime Policy – p 55 To understand how to alleviate problems in the playground and use this information to generate a playtime policy. To compare the policy with another and make judgements on the value of their own and others ideas.	Evaluation skills	1 hour

	<b>YEAR 4</b>		
<b>Week No.</b>	<b>Learning Objective:</b> <i>Activity, book and page number. Break down of the LO</i>	<b>Area of learning:</b> <i>Information processing, reasoning, enquiry, creative thinking &amp; evaluation skills</i>	<b>Duration of lesson:</b>
1	Land sale – design and create own land sale activity. Creative Thinking 8-10	Information processing	1.5 hours
2	Somerset Thinking Skills unit 1 (19) The Bedroom p45	Enquiry skills	1.5 hours
3	Use book ‘What do you do with an idea?’ – Creative thinking activity about not being afraid to share ideas	Evaluation skills	1 hour
4	Whigby – Outside the Box 9-11 p62, 63	Reasoning Skills	2.5 hours
5	Super Scarecrow - Outside the Box 7-9 p8,9	Creative Thinking	1 hour
6	Thinking Skills 8-10 red book pg 41: ‘Finding Categories’ How to sort objects into groups – describe each group and give reasons why the objects are grouped together	Information processing	1 hour
7	Inspirational Ideas, Outside the Box 7-9 ‘Front Doors’ – asking questions, research, predicting outcomes	Enquiry skills	1 hour
8	Outside the Box 7-9 red book. P20, 21 ‘Fruit for playing games’ Children to decide on a criteria for a good game. Dragons den style evaluation	Evaluation skills	1.5 hours
9	Outside the Box 7-9 (red book) ‘Croast Valley’ page 6-7 – designing hazard signs	Reasoning skills	1 hour
10	Thinking Skills 8-10 Ideas to Go p31 ‘Hip pip Hooray’	Creative Thinking	30 mins
11	Thinking Skills 8-10 Ideas to Go ‘Sort them’ p42	Information processing	1 hour
12	Thinking Skills 8-10 Ideas to Go ‘Making It Different’ p47	Information processing	1 hour

<b>YEAR 5</b>			
<b>Week No.</b>	<b>Learning Objective:</b> <i>Activity, book and page number. Break down of the LO</i>	<b>Area of learning:</b> <i>Information processing, reasoning, enquiry, creative thinking &amp; evaluation skills</i>	<b>Duration of lesson:</b>
1	Bat 'n' Ball OTB 9-11 p.22-23 To invent a game with unusual bats and balls.	Enquiry skills	1 hour
2	Finding categories TS 8-10 p.41 To group items based on general themes.	Information processing skills	1 hour
3	Sort them TS 8-10 p. 42 To sort objects into appropriate sets.	Reasoning skills	1 hour
4	Whigby Outside the Box 9-11 p62- 63	Reasoning skills	2.5 hours
5	Four bus stops OTB 7-9 p.62 To decide the best route and position of bus stop.	Evaluation skills	1 hour
6	Change these shapes TS 8-10 p.24 To use a given line to create a new shape.	Creative thinking skills	1 hour
7	Cartoon story board CT 10-12 p.24 To tell a story using pictures.	Creative thinking skills	1 hour
8	A better place town OTB 9-11 p.11	Creative thinking skills	2 hours
9	A Roog OTB 9-11 p. 30-31	Creative Thinking Skills	2 hours
10	Radio show OTB 9-11 p.12-13 To produce an interview, an advert and jingle for a radio show.	Creative thinking skills	1 1/2 hours
11	Four letters OTB 9-11 p.56-57	Information processing skills	1 hour
12	Making It Different Thinking Skills 8-10 Ideas to Go p.47	Information processing skills	1 hour
13	Magic machine OTB 9-11 p.20-21 To draw a magical machine and advertise it to show what it does.	Creative thinking skills	2 hours

14	Bocca Island OTB 9-11 p.58-59 To make a plan to sort out the difficulties on the island	Reasoning skills	1 hour
15	A bag of magic OTB 9-11 30-31 To create a diary entry about 5 magic objects and how they affect your week.	Creative thinking skills	1 hour

	<b><u>YEAR 6</u></b>		
<b>Week No.</b>	<b>Learning Objective:</b> <i>Activity, book and page number. Break down of the LO</i>	<b>Area of learning:</b> <i>Information processing, reasoning, enquiry, creative thinking &amp; evaluation skills</i>	<b>Duration of lesson:</b>
1	Four letters- Outside the box 9-11 Pg. 56-57	Information processing	1 hour
2	That's criminal Thinking skills 10-12 Pg. 18	Information processing	1 hour
3	The perfect character Creative thinking 10-12 Pg. 44	Enquiry Skills	1 hour
4-5	World's worst world's best Outside the box 9-11 Pg 42-43	Evaluation Skills	1 1/2 hours
6-7	Whigby Outside the box 9-11 Pg 62-63	Reasoning Skills	2 hours
8	Stamp out poverty Thinking Skills Pg. 43	Reasoning Skills	<1 hour
9	Disastrous Desmond Outside the box 9-11 Pg. 22-23	Creative Thinking Skills	1 hour
10-11	A Roog – Outside the box 9-11 Pg. 30-31	Creative Thinking Skills	2 hours
12	Diary entry for a creature created in the Roog (above) Outside the box 9-11 Pg.32-33	Creative Thinking Skills	1 hour
13	A revolting menu Outside the box 9-11 Pg. 38-39	Creative Thinking Skills	1 hour (book suggests 3)

**Other ideas:**

**Make a list - Thinking Skills 10-12 Pg. 19 (as starters)**

**Football League (Task Card 4) – Thinking Skills 10-12 Pg.47**

**Bundy's activity pack - Outside the box 9-11 Pg 60-61 (after SATS project?)**