

Research from John Hattie and the Education Endowment Foundations shows the importance of metacognition in student thinking, learning and progress. It is important to stress that reflection is not just something that is done at the end of a unit of work but that it can be something that is woven into the fabric of everyday learning.

Here are some questions that you could encourage your child to ask themselves:

## Metacognition: Reflect

- **Before a Task** – How does this link to previous learning? Is this similar to a previous task? What do I want to achieve? What should I do first?
- **During The Task** – Am I on the right track? What can I do differently? Who can I ask for help?
- **After a Task** – What worked well? What could I have done better? Can I apply this to other situations? What was the most difficult aspect of this work? What made it difficult? How did I overcome this?

# Questions that unlock thinking

- **Evidence** - How do you know that? What evidence is there to support that position?
- **Clarification** - Can you put that another way? Can you give me an example? Can you explain that term?
- **Explanation** – Why might that be the case? How would we know that? Who might be responsible for...?
- **Linking and extending** - Can you add to what X just said? How does this idea support/challenge what we explored earlier in the lesson?
- **Hypothetical** – What might happen if...? What would be the potential benefits/impact of X?
- **Summary and synthesis** – What remains unsolved/uncertain? What else do we need to know or do to understand this better/be better?
- **Metacognition** – What was the most difficult part of that task? How would you do it differently next time? How could you approach this question?

## **Key Recommendations KS3:** **Strategies for Stretching and Challenging the Most Able**

### **Art**

- Develop a more personalised approach to learning by making use of diaries and own sketchbooks at home
- Use new technologies to further extend skills
- Reflect on the work of other artists
- Seek additional guidance from books, art blogs or working artists to extend knowledge and skills
- Use a variety of media, including electronic and lens-based forms to imagine and interpret local stories, events and themes in visual and tactile terms
- Visit Art galleries and sculpture parks to gain inspiration and to evaluate others' work

### **Dance**

- Arrange to watch a variety of professional dance works- 'The Point' in Eastleigh and 'The Mayflower' in Southampton regularly show work from ballet, contemporary, cultural and vocational styles
- Participate regularly in Dance classes in a variety of different styles. Ballet will help with core physical skills, such as core stability, flexibility and posture. Contemporary dance will help with a more diverse vocabulary of movement and use of floor work. All styles of dance will provide better opportunities to continue excelling in both performance and choreographic skills.
- Attend school based clubs, which can lead to being invited to be part of Bare Roots Dance Company. Year 7 Dance club is held on a Monday (3pm-4.15pm in the Multi Hall)
- Get involved in workshops, auditions and Summer Schools. Both 'The Point' and the D@rt host a large number of different intensive workshops, and offer auditions for Dance companies in the local area. AMOA Company are currently offering an opportunity to audition to be involved in an elite dance group.

### **English**

- Engage frequently in wider reading of both fiction and non-fiction texts. This can include novels, newspaper articles, biographies and autobiographies to give a 'rich diet' for reading.
- Read 19<sup>th</sup> century and 'classic' novels in order to become familiar with how writing has been shaped over time, and how language has evolved. There are a wide variety of such texts available in the LRC
- Discuss reading material at home in order to explore different opinions and reactions to texts.
- Use sites such as 'Sparknotes' and 'Seneca Learning' to develop responses to texts.
- Build an anthology of creative writing, using reading material, news stories and images as writing prompts
- Develop vocabulary through reading of quality texts, and through direct instruction using academic vocabulary lists (see '100 Words to Sharpen Your Expression' by Geoff Barton)
- Engage with current affairs in order to increase cultural awareness, exploring how issues are written and spoken about in the media.
- Attend 'Spilling Ink' - a creative writing club that runs each week on a Monday after school.
- Take part in the reading and writing based House Competitions that run each year.

### **Geography**

- Keep your keyword glossaries up to date and revisit any new vocab on a regular basis

- Keep up to date with Geographical events around the world by watching the news and use these as examples in your writing
- Take on board feedback from your teacher and respond and redraft using your green pen
- Take part in the house competitions that run throughout the year
- Watch travel programmes and listen to podcasts by experts in the field e.g. Simon Reeve and Iain Stewart

## History

- Visit museums, art galleries and other historic sites to get up close to the past. Netley Abbey and Southampton's Medieval Town Walls are free and local!
- Use the LRC or other local libraries to expanding you reading of History. Ask your teacher for recommendations for books on the subjects you are studying or others more further afield.
- Take an interest in what was going on in other parts of the world at the same time as things we are learning about by going on '[meanwhileelsewhereinhistory.wordpress.com](http://meanwhileelsewhereinhistory.wordpress.com)'.
- Keep up to date with Historical news
- Take place in house competitions throughout the year such as the book covering competitions

## ICT

- Develop Computer Science fundamentals at <https://studio.code.org/>
- Use [flowlab.io](http://flowlab.io) to create your own games online
- Develop Python coding skills by completing the free online coding tutorials (<https://www.codecademy.com/learn/python>) (<https://www.learnpython.org/>)

## Maths

- Develop problem solving skills, by exploring how to apply maths skills to unfamiliar situations
- Use the following websites to access activities which will allow for the application of this:
  - o <https://nrich.maths.org/secondary-lower>
  - o <https://www.ukmt.org.uk/individual-competitions/>

## MFL

- **Learn** your vocabulary regularly - little and often is the best way to memorise the words in the long term. Use look cover write check and focus on the harder words (the trickiest words deserve more attention!)
- In French, use the Cuddle technique for the hardest phrases and spellings (Count the letters in the words, Underline the vowels, Double underline the double consonants, Dot silent letters, Link the sounds, Exaggerates the accents)
- **Reuse** and **recycle** what you have been learning in class! If set a self-study task to complete at home, you should not have to resort to using the dictionary, or worse Google translate!
- **Take** your book home when a self-study task is set and use what is in it!
- **Course guides** are on G-classroom as a PDF. Don't print it out (it's 50 pages long!), but you can use it to help you.
- **Always** meet the self-study deadlines - feedback and marking is often done live in class, on the day it is due, whilst it is fresh in your mind. This is the best way to ensure you improve!
- **Always** accept that language learning is a journey! you will find some things easy, some things more challenging... Always give yourself a chance to be your best!

## **PE**

- Attend and watch as many major sporting events (Television / or in person) as possible across a breadth of activities e.g. Ageas Bowl / Southampton FC / Wimbledon
- Maximize opportunities for extended writing outside of PE to develop technique, such as through writing an analysis or evaluation of a sporting performance
- Participate in competitive sport (not merely recreational), representing the school (where appropriate) or a club

## **RE**

- Develop an awareness of what is happening in the world today, so that real life examples can be brought into their work
- Watch and read the news in order to engage with current affairs
- Discuss and explore opinions in reaction to items in the news- what do you think or feel about this?
- Join Philosophy Club, who meet once a fortnight. This will help develop philosophical lines of enquiry
- Participate in the annual Philosothon
- Express an interest in the annual RE SACRE Youth Conference
- Read texts on the book list available in the LRC

## **Science**

- Use the website 'Kerboodle' (students have a log in for this) to access the textbooks used in class.
- Use websites such as BBC Bitesize and Seneca Learning to get a head start on mastering the fundamentals of cells, energy, forces and fundamental Chemistry.
- Subscribe to 'New Scientist' in order to engage in wider reading.
- Follow NASA and 'New Scientist' on social media.
- Listen to podcasts, such as 'Infinite Monkey Cage', Brian Cox, or radio programmes such as BBC Inside Science Radio.
- Visit science museums and exhibitions, such as the Winchester Science Centre.
- Watch television programmes, such as 'Duck Quacks Don't Echo', 'Mythbusters' and 'How It's Made'.
- Watch Youtube channels, such as 'TED Ed', 'ASAP Science' and 'Crash Course'.
- Join the school's STEM club.
- Use the flashcards made for self study to learn the definitions of key-words.

## **Technology**

- Put in the extra time after school and be motivated to adapt and re-design work consistently
- Settle for nothing other than perfection. If it's not perfect, re-make it!
- Listen carefully to advice from teacher
- Doodle and plan at home
- Practise skills at home, particularly drawing and cooking
- Join D&T club run by Miss Overend to develop D&T practical skills
- Join Textiles club run by Miss Blackwell to develop textiles practical skills

Potential



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Discover.  
Nurture.  
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# Fun ideas to encourage deeper learning at home



## Introduction

Potential Plus UK is a national, independent charity that supports parents/carers and teachers to understand and meet the educational, and social and emotional needs of their children with high learning potential\*; some of whom may also have a special education need. We endeavour to do this regardless of age or background.

We offer a free web chat service during term time, as well as bookable consultancy calls for parents and teachers. Our services also include child assessments for high learning potential, parent workshops, family events and training for teachers.

For more information visit [www.potentialplusuk.org](http://www.potentialplusuk.org)

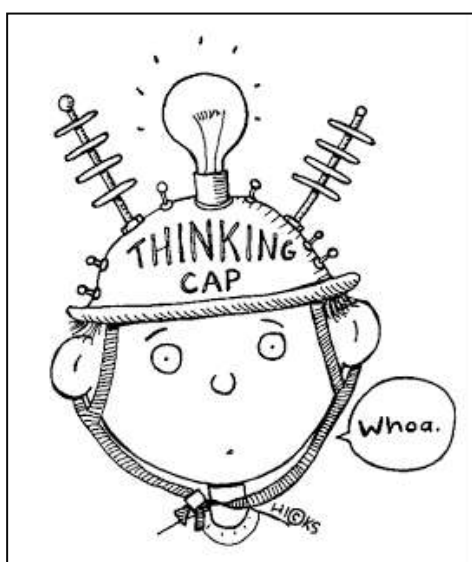
## Fun ideas to encourage deeper learning at home

Firstly a little clarification on what we mean by 'deeper learning'.

### What is meant by deeper learning?

There can sometimes be an emphasis on questions and tasks that concentrate on 'remembering' information and concepts, and on 'understanding' them. However, all children, and especially those with high learning potential\*, need regular opportunities to deepen their learning.

This 'deeper learning' can be provided through opportunities where the children can apply their knowledge and understanding through rich and sophisticated problems. In this booklet we will look at fun ways to try some of these at home.



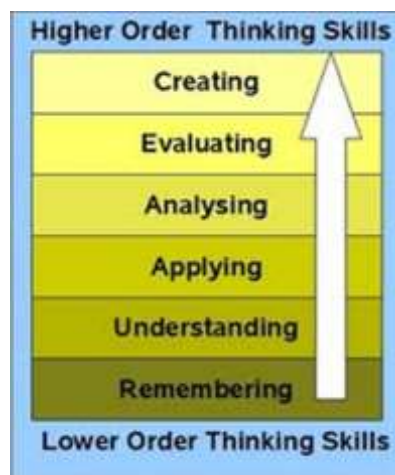
\* Potential Plus UK prefers the term 'high learning potential'. In schools this is often referred to as 'gifted and talented' or 'academically more able'.



## Higher order thinking skills

Higher Order Thinking Skills (HOTS) are types of learning that are thought to require more cognitive processing (brain power!) and have more generalised benefits than other, Lower Order Thinking Skills (LOTS). High potential learners often master the lower order tasks very quickly and benefit from being able to think more deeply more often. Activities and questioning that encourage your child to develop their higher order thinking is extremely beneficial, both for their learning and for their enjoyment.

Bloom's (Revised) Taxonomy is a classification of learning objectives, which are perceived to be higher order and lower order. Learning at the higher levels is dependent on having gained knowledge and skills at lower levels. Thinking at the higher levels is also often called critical thinking and creative thinking.



The bottom two levels are 'remembering' and 'understanding'; lower order thinking skills. The complexity of the question or task increases as you go up the levels.

The levels:

- Remembering – Recalling the information (concepts, ideas, facts, skills)
- Understanding – Grasping the meaning
- Applying – Using the information in a new situation
- Analysing – Comparing and contrasting information
- Evaluating – Developing opinions and judgements about the information
- Creating – Using all your knowledge and understanding to come up with something completely new and different



## Bloom's Activity to Try Yourself

Most of you will know of the fairytales 'Goldilocks and the Three Bears' and 'Little Red Riding Hood'. The tasks below are based on the story of Goldilocks. Read through the questions and tasks, then draw a line to the level of question that you think it is.

Question or Task
List the main characters in the story
Compare and contrast the characters of Goldilocks and Little Red Riding Hood
Judge whether or not Goldilocks should have acted as she did and give your reasons
Illustrate what might change if Goldilocks forced open the door of the house
Rewrite the last scene of the story
Draw a timeline for the events in the story

Bloom's Level
Remembering
Understanding
Applying
Analysing
Evaluating
Creating

An answer is given at the end of this booklet for you to check.

What is it about the question or task that helped you to decide the level of thinking required for it?

You have probably said 'the verb' – that is List, Compare and contrast, Judge, Illustrate and change, Rewrite, and Draw.....in many cases these really help to differentiate the level of thinking that is required for the task. So if we change the verb used in a question we can often make the question or task more complex.

The next page shows lots of different verbs and tasks that add complexity and deeper learning to any topic.



The table below shows some of the verbs used to ask questions at each of the different levels of the taxonomy, along with example tasks and example questions:

Thinking Skill	Verbs Used	Example Tasks	Example Questions
<b>Remembering</b>	Name Find Write Tell List State Recite Also who, what, where, how etc	List Timeline Facts Recitation Quiz Flashcards Bullet points	How many...? Name the ...? What is...? Who was it that...? List the ..... Find the .....
<b>Understanding</b>	Describe Summarise Discuss Outline Predict Interpret Explain	Summary Explanation Mind map Presentation Timeline Scrapbook Examples	Describe in your own words...? Outline for me....? Summarise the events... Explain why... happened?
<b>Applying</b>	Demonstrate Solve Use Apply Illustrate Construct Examine	Illustration Project Role play Map Diorama Leaflet Newspaper Article	Demonstrate another instance when... Construct a set of instructions to... What questions would you ask of...? Examine how....
<b>Analysing</b>	Categorise Analyse Classify Compare Contrast Separate Relate	Diary Collection Illustration Questionnaire Flow-chart Model Diagram	How is this similar to...? Compare and contrast... What are other possible outcomes? Distinguish between? Classify the requirements....
<b>Evaluating</b>	Judge Critique Justify Debate Recommend Prioritise Experiment	Survey Graph Report List criteria Debate Essay Written case	Judge the value of...? Do you think...is a good or bad thing? How would you feel if? How effective are...? Prioritise.....
<b>Creating</b>	Design Create Plan Construct Invent Devise Make	Story Poem Play Song Animation Invention Website	Design a... Invent a solution to.... Construct a completely new.... Rewrite the ending



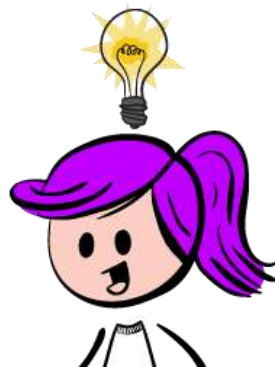
## To try at home

- Whenever you are about to ask your child a question, just take a few seconds to think about the level of thinking required to answer it. Rather than asking a 'remembering' or 'understanding' question, try to turn it into one that develops your child's higher level thinking skills.
  - Rather than "Tell me what happens in the book", try
  - "Compare and contrast the two main characters in the story."
  - "Recommend the book to me."
  - "Invent a new ending for the story."



- Choose any topic, a book, a game, or TV programme that you are interested in or where you share an interest with your child and devise some appropriate questions and tasks that go up through the Bloom's thinking levels.

- As appropriate ask your child to do something similar. Over time this will also help them to better understand the complexity of thinking that is required for a task or a question.



## Creative thinking

Creative thinking is a way of looking at problems or situations in a new way that creates unusual or different solutions.

Creative thinking helps to:

- Develop the imagination
- Generate lots of ideas
- Experiment with alternatives
- Develop flexibility and originality
- Become more open and tolerant
- Build courage and intellectual risk-taking (that is, the courage to take an intellectual challenge)



Creative thinking is linked to higher order thinking.

## To try at home

### OTHER USES



You have 2 minutes to come up with as many different uses for an egg cup as possible. There are no right or wrong answers!

Doing a timed task helps children get used to doing things within a set period of time in a fun way.

It is important to highlight the number of ideas generated.

Ask which idea they like the best and why?

Try OTHER USES with different items.

Increase complexity by asking your child to think about the uses of the egg cup if it were smaller, larger, made from a different material, or from a different perspective, such as if they were an alien, or an elephant!

You could also relate the item to school subjects or course work; but still make it fun!



## WHAT IF...?



You have 2 minutes to generate ideas about what might happen if the tilt of the earth increased. At this stage there are no right or wrong answers!

Highlight the benefit of generating lots of ideas.

Ask which they like best and why?

Create your own 'WHAT IF...?' scenarios to try with your child. They could create some too for you to try!

If you want to relate it to school subjects, ask your child's teacher/s about current school topics that they are studying.

## WORD FUN



Make a sentence starting with the following letters:

M... F... I... A... G... C...

For example:

My father is a great cook.

Devise your own game: Cut individual letters and put them into a container. Pull out 6 at a time and create a sentence that makes sense. Increase the number of letters; add punctuation, topics etc in additional containers for deeper complexity.

Try it with numbers rather than letters!

## BOARD GAMES FOR CREATIVE THINKING

There are lots of board games that encourage creative thinking, such as:

- Junior PSI
- What is this?
- Balderdash



## Critical thinking

Critical thinking is the ability to think clearly and rationally.

Critical thinking helps to:

- Make and understand links between ideas
- Identify, create and evaluate arguments
- Notice inconsistencies and common mistakes in reasoning
- Identify the relevance and importance of ideas
- Reflect on the justification of our own beliefs and values
- Solve problems systematically



## To try at home

### FACT OR OPINION



Write down 2 facts about yourself – something that can be proven to be true or false – and 1 opinion.

For example:

I live in London.

I am good at problem solving.

The colour of my front door is red.

Ask your child which are facts and which are opinions. How can they check the facts?

Ask your child to do something similar about them self.

Together look at a variety of different sources, such as newspaper articles and TV advertising, and see if you can work out which are the facts and which are opinions.

Explore different situations when there are advantages and disadvantages of using fact and opinion.



## SPOT THE DIFFERENCE



Any activity that encourages your child to closely examine a variety of texts, sounds or pictures helps them to identify inconsistencies; it encourages them to compare and contrast.

Take two articles from two different sources about the same topic, for example an article from two different newspapers, and together consider the similarities and the differences. You could also compare them with the TV news report or the online news. Explore why there are similarities and differences!

## PLUS MINUS INTERESTING

Many high potential learners have lots of ideas and thoughts in their heads and for some it is difficult to find their way through this mass of information. Exploring and listing the 'plus' points and 'minus' points about a challenge, problem, situation, or decision, can help them to gain clarity.

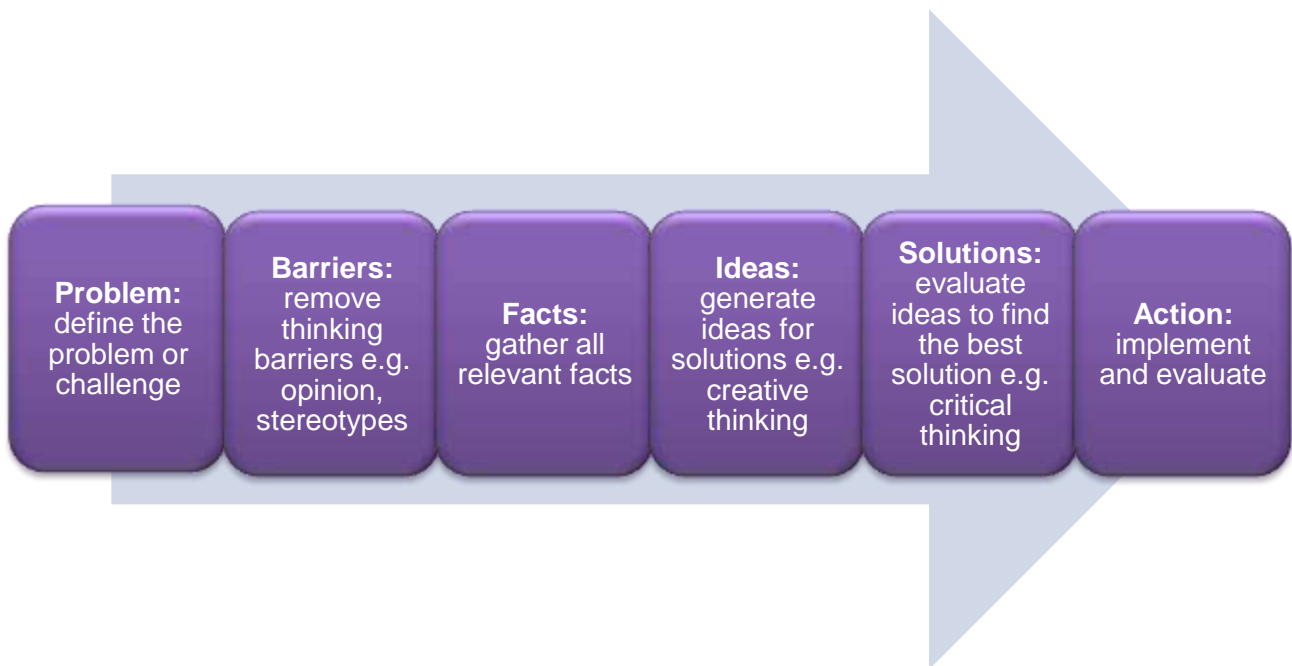
Encourage them to think about anything 'interesting' that their exploration uncovered, for example, something they would like to know more about, or a train of thought that would take them 'off topic' in a different direction.



## Problem solving process

The ability to problem solve and be innovative are important life skills. All of the above ideas on higher order thinking, creative thinking and critical thinking can be applied to aid the problem solving process!

Below are 2 examples of structures that can aid the process, but you and your child might create your own that works for you!



### To try at home

Think of a challenge that you and your child can work through together. Here are some examples of challenges:

- Filling the long summer holiday
- Helping a local charity
- Eating fun, healthy and cost-effective food





## Board games

Board games are a great, fun way of developing skills, learning to fail in a safe environment and learning together as a family.

Here are just a few ideas:

Strategy skills	Chess, Go, Settlers of Catan, Mancala
Verbal skills	Apples to Apples, Taboo, Last Word, Articulate, Don't Say It
Visio-spatial skills	Swish Junior, Shape by Shape, Brain Box, Qwirkle
Problem-solving skills	Spin-out Brain Teaser Challenge, River Crossing, Rush Hour Junior

## More help and support

We hope that you enjoy some of these ideas to encourage deeper learning at home.

As a national charity our aim is to help these young people to thrive both educationally and in their overall well-being. If you would like more help and support please do not hesitate to contact us.

For more information visit [www.potentialplusuk.org](http://www.potentialplusuk.org)

