

Reasoning Activities for P5 – P7

Model Making Challenge

The aim of this activity is to encourage your child to problem solve.

This activity could be completed using Lego or building blocks, junk materials or drawings and paper.

Set your child a challenge to create a particular object, e.g.

Adult: *'Well, the challenge for today is to make a vehicle that can go underwater. We can work together, or you can work on your own. Would you like my help?'*

Child: *'No, I'll do it on my own and show it to you when it's done. I'm going to make a vehicle to go underwater!'*

Possible challenges are:

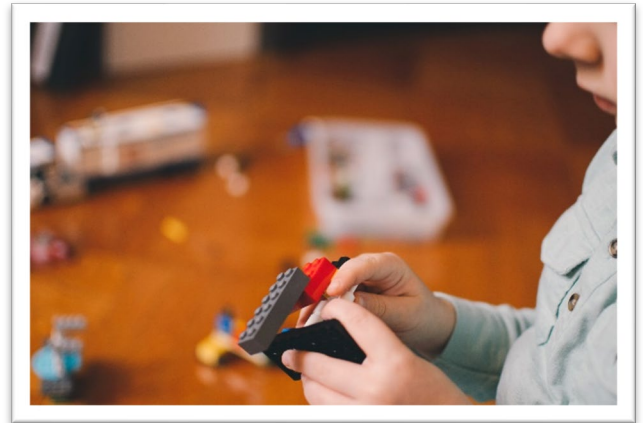
- A building for keeping lions in
- A house to go on the seabed
- A rescue vehicle
- A space station

They can let their imaginations run wild and it provides lots of opportunities for problem solving and using their imagination.

This also provides a great opportunity for discussion about the finished product, e.g.

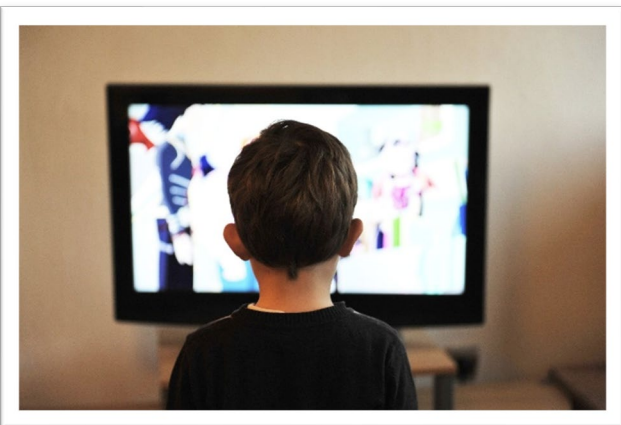
Adult: *'I see you have a long blue tower coming up to the top of the water. Why did you do that?'*

Child: *'I made that so that the people could breathe.'*



Guess what they are saying!

The aim of this activity is to encourage your child to make inferences and predictions about what is likely to be said.



Children will often sit for long periods in front of a screen – television, tablet, computer etc.

For this activity, simply just turn down the volume of the television, (do not choose their favourite programme).

Encourage the children to guess what the characters or people on the television are saying.

Make up the story, or the news, in the television excerpt that you have shown them. This can provide lots of fun in addition to helping with prediction, verbal reasoning and inference skills.

Play a Barrier Game

The name 'Barrier Game' means a game where the two players can't see what each other is doing. They could sit back to back. That's great fun.

Or, they could put some sort of barrier between them, so the other player can't see what you are doing. Barrier games can be enormous fun, whether you choose to sit back to back, or put up a barrier in front of you. The best barriers to put in front are big open books.

The aim of this activity is for your child to look at a simple picture and describe what you have to draw to match the child's picture. This will help with their ability to explain things.

This game is easier when played 1:1. It would also be best for the adult to give the instructions to the child first as this will provide the child with a good model of the language needed.

Adult: *'I am going to look at my picture and not let you see it. I will give you the instructions for how to draw a picture the same as mine. You need to listen very carefully, and it is ok for you to ask questions if you are not sure what I mean.'*

Adult: *'I will give you the instructions slowly. Here is the first one. Draw a large rectangle, with its longest side going across the page. Make the rectangle cover half your page.'*

Adult: *'Are you ready for the next instruction?'*

Child: *'Yes'*

Adult: *'Now draw a triangle on top of the rectangle for the roof.'*

The instructions continue until the picture is finished and the 2 pictures are compared. At this point the child can have a turn at giving the instructions as the main aim of this activity is for your child to develop their ability to explain things. Initially use images that are simple and easy to describe using simple language. As your child's language develops, and they become more confident and accurate in describing the images you can make the pictures more complex.

You could draw any image, e.g.

- House,
- Flower
- Snowman
- Face
- Tree

20 Questions

The aim of this game is for your child to ask questions and be able to remember and use the answers to guess a possible object.

One person thinks of an object or has an object or picture hidden in a bag.

Your child has to ask up to 20 questions to try and guess what the object is. You may need to discuss what sort of question would be best to ask before beginning the game. For example:

Adult: *'What sort of questions do you think it would be a good idea to ask? You could ask is it something you eat?'*

Child: *'Is it an animal?'*

Adult: *'Is it big or small?'*

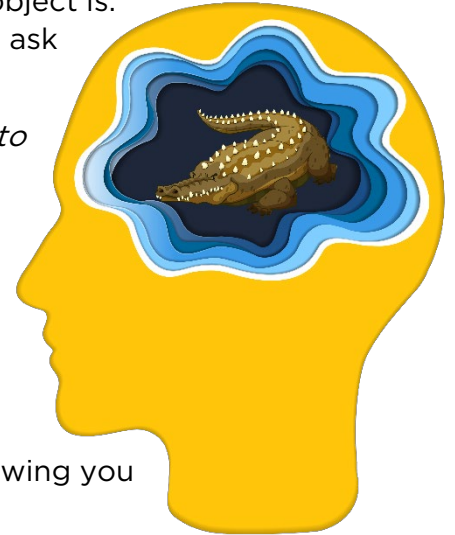
Child: *'What colour is it?'*

And so on...

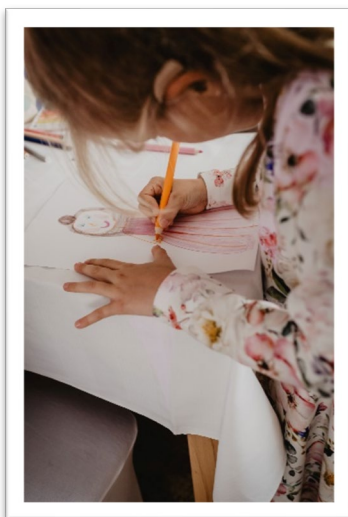
It may be useful for you to take a turn asking the questions first, allowing you to model the type of questions for your child.

This activity will take a bit of practice and will need to be repeated a number of times before your child is able to ask questions independently.

To make it harder, the person who is thinking or hiding the object can only answer 'yes' or 'no' to each question!



Picture this!



The aim of this activity is to encourage your child to use visualising and verbalising skills.

Provide the child with a piece of paper and drawing materials.

Tell them you will read them a short story or poem. When you are finished, they are to draw a picture that relates to what they just have heard. Reassure them that they don't have to draw everything they hear about but can pick out the part they liked the best or the part they pictured most easily.

Encourage your child to talk about how their drawings relate to the text that was read aloud. This provides opportunities for discussion about their illustration and encourages your child to discuss their views.

Research answers to your child's questions

The aim of this activity is to both increase your child's self-esteem, let them know you value their questions as well as encouraging them to be inquisitive.

Your child probably asks lots of questions every day that you don't always know the answer to!

Things like:

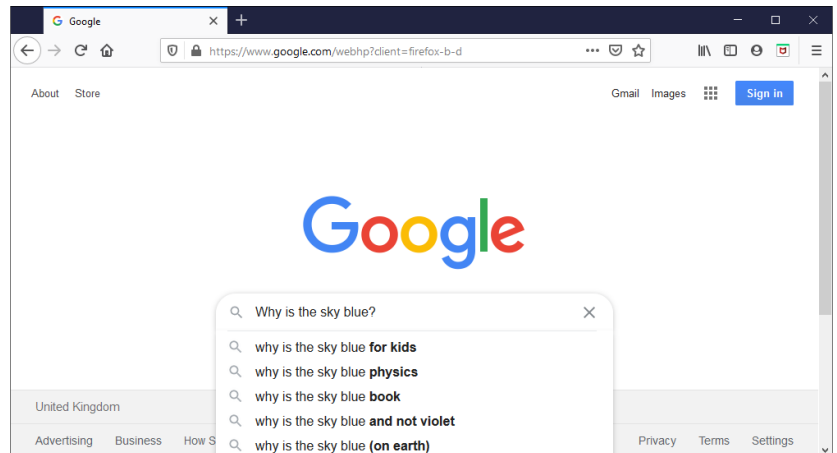
'Why is the sky blue?'

'Who invented electricity?'

'Why did the dinosaurs die?'

'How do they make cheese?'

The list is endless!



Show that you are listening to your child and you are interested in what they have to say by researching the answer with them – look on the internet, phone a relation, speak to a friend, take your child to the library to look for the answer. This teaches your child that you respect and value their ideas and imagination.

It may be fun for you and your child to research the answer to their questions together.

Playing Games

Board games and puzzles are a great way of helping to develop your child's logical thinking skills. They can be a great way to develop turn taking skills and concentration also, e.g.

- Orchard games
- Snap or pairs card games
- Snakes and ladders
- Headbanz
- Cluedo
- Draughts
- Happy Families
- Go Fish
- Jigsaws



Talk about why you prefer your favourite things

The aim of this activity is to encourage your child to justify why they have an opinion on something.

Take it in turns to talk about your favourite things and why you like them more than anything else.

- Adult: *'Let's talk about dinners.
Well, my favourite is spaghetti Bolognese, because I love sucking up the'*

Child: *'Mine is pizza and chips because chips a really nice'*

- Child: *'My favourite hobby is running because I like being outside.'*

Adult: *'My favourite hobby is cycling. I like to go fast down the hills.'*

Encourage the child to explain why they prefer it.

You could complete this activity 1 to 1 with your child or involve everyone at home. Your child may find it helpful to hear your answer first. This will give them a good model of how they should structure their answer and gives them time to think also.

Then:

Talk about why you don't like something.

Take it in turns to talk about your least favourite things and why you don't like them as much as something else.

- Adult: *'Let's talk about animals. I don't like cows because they are smelly.'*

Child: *'I don't like rats because they have big teeth'*

- Adult: *'Let's talk about vegetables. Which do you not like?'*

Child: *'Cabbage because it is slimy.'*

Adult: *'Well I am like you, I am not really fussed on Brussels sprouts because they taste bitter.'*



Encourage the child to explain why they don't like it.

Listening to stories:

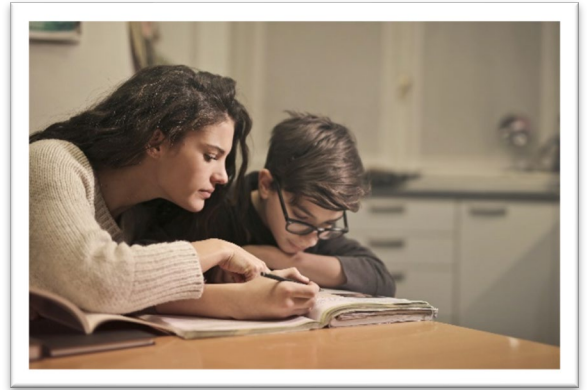
The aim of this activity is to encourage your child to give an appropriate response to a 'wh' question.

Allow your child to pick a story book for you to read together. While you read the story ask them questions about the story.

Children learn to answer in questions in a specific order: Who. What. Where. When. Why. How.

When asking questions begin with the easier questions first and progress on to the more challenging questions e.g.

- Who do you see in the picture?
- What are they doing? / What do you think will happen next?
- Where are they / where do you think they are going?
- When do you think we will see...?
- Why do you think they are doing that?



If your child is experiencing difficulty answering, don't rush them, give them the time they need.

You may feel you need to help them out, if so, give them options for answers to choose from, not just the answer straightaway.

You can use pictures from the book and encourage your child to retell the story in their own words.

Allow them to also ask you 'wh' questions about the story!

Why / Because

The aim of this activity is to make your child focus on the cause of why something happened.

You could do this using story books, pictures or real life experiences.

While you read together, ask your child 'why' questions about what is happening. e.g.

- You: *'Why is the boy smiling?'*
- Child: *'Because he is happy/ he has an ice cream.'*

You can then try and have your child describe their answer in more detail.

This could also be done while you're watching TV, or in the garden / out for a brief walk, making your child look around them and observe their surroundings.

Odd One Out:

This game gives your child the opportunity to examine and explain the relationships and connections between items. They must find the item which does not belong in the group and explain why it is the Odd One Out.

You can use items from around the house, toys, animals, vehicles, food items or pictures.

Place 4 items in front of the child and encourage them to identify which is the odd one out and why.

You may find that your child has more difficulty explaining why the item does not belong than picking it out if the set e.g.:

- Knife, fork, spoon, sock (*sock is clothing and others are cutlery*)
- Shoe, trainer, boot, hat (*the hat goes on your head and the other go on your feet*)
- cup, plate, glass, mug (*the plate is for putting food on and the others are drinking out of*)



Initially use objects which are very obviously different from the rest of the set, e.g. putting a vegetable with vehicles/ an object that is a different colour from the rest. Then you can increase the difficulty by using object where the odd one out is less obvious, e.g. a fish, an octopus, an elephant and a shark. (the elephant is the odd one out as it doesn't live in the sea)

For an entertaining twist, let the child become the teacher and set out four or five items for you to examine and find the Odd One Out.