



Cognitive Load Theory Information for Parents



We are one school within a Learning Partnership. Despite geographical differences we are all united under one vision. The Arthur Terry Learning Partnership (ATLP) believes that every child has the right to be a powerful learner. Our schools are connected by a strong moral commitment to provide accessible, outstanding education for all in happy, creative, nurturing and aspirational environments.

— SECONDARY SCHOOLS —



THE ARTHUR TERRY SCHOOL



THE COLESHILL SCHOOL



NETHER STOWE SCHOOL



Aspire Believe Achieve

STOCKLAND GREEN SCHOOL

— PRIMARY SCHOOLS —



BROOKVALE PRIMARY SCHOOL



CURDWORTH PRIMARY SCHOOL



HILL WEST PRIMARY SCHOOL



MERE GREEN PRIMARY SCHOOL



SCOTCH ORCHARD PRIMARY SCHOOL



SLADE PRIMARY SCHOOL



TWO GATES PRIMARY SCHOOL



WILLIAM MACGREGOR PRIMARY SCHOOL

Workshop Aims:

- **To understand the importance of knowledge within a school's curriculum**
- **To know how the brain works and the effects that this has on the learning process**
- **To establish how parents can support at home**

Do Now Activity

**Name the song and the artist.
Quietly to yourself, fill in the blanks**

????

a plastic bag?

Drifting through the wind

Wanting to start again

Do you ever feel, feel

????

Like a house of cards

One blow from caving in

????

buried deep?

Six feet under screams, but no one seems to hear a thing

Do you know that there's still a chance for you?

'Cause there's a spark in you

You just gotta ignite the light

????

Just own the night

Like the Fourth of July

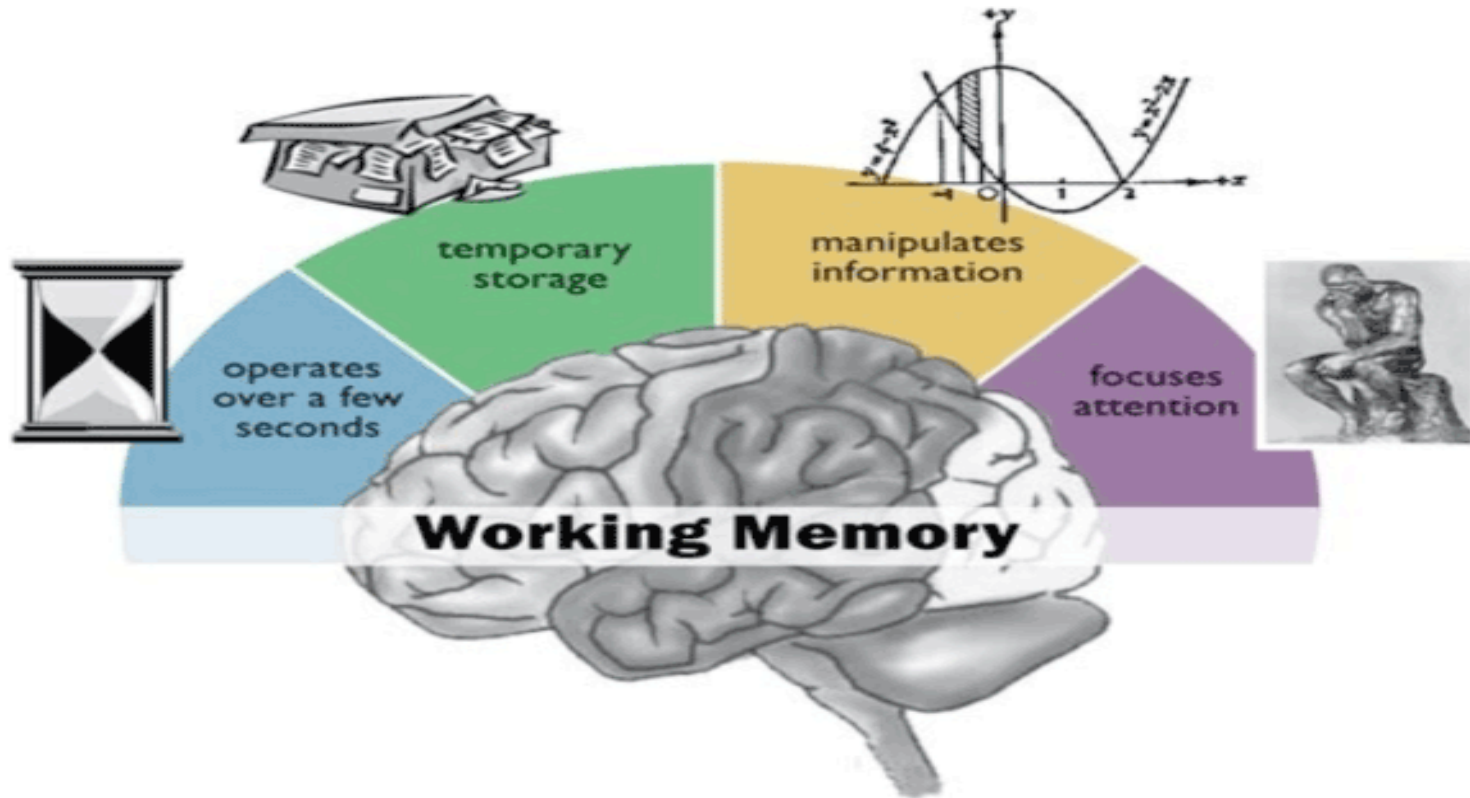
Why is cognitive load so important?

- Supporting ALL students to succeed
- Majority of subjects are 100% exam with greater amount of content and challenge in specifications
- We are addressing mental wellbeing

How is learning defined?

Learning is at least in part defined, “...**as a change in long-term memory**”. As Sweller et al (2011) have pointed out, “...**if nothing in the long-term memory has been altered, nothing has been learned**”.

Working Memory



This is where information and knowledge is very briefly stored.

But it's a temporary holding area.

It can only hold a maximum of **5 items (7 for adults)**

When new information comes in, something else gets pushed out....

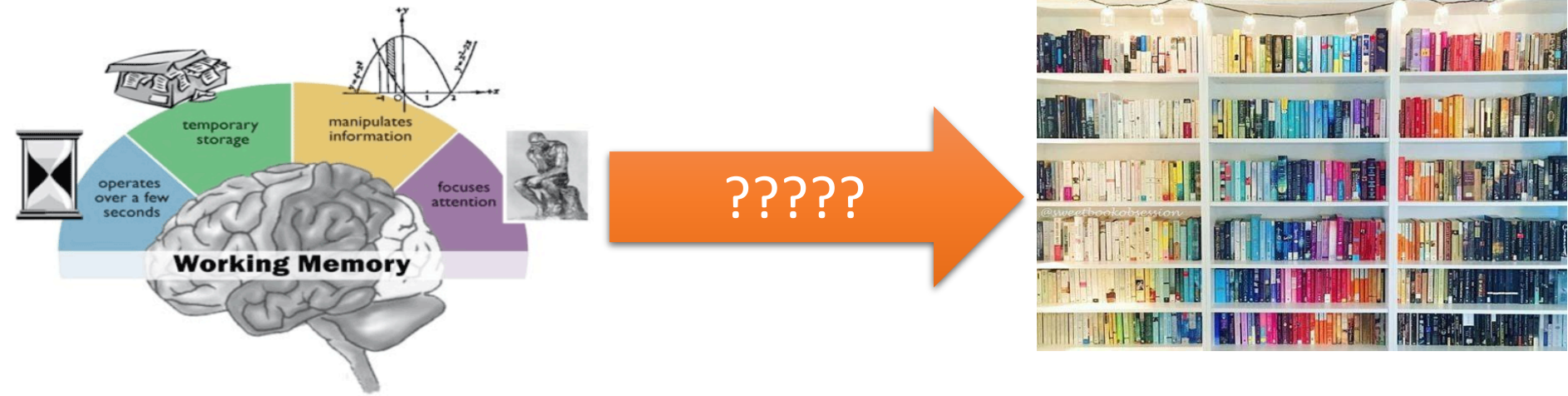
Long Term Memory



...unless it can get be stored in your long term memory.

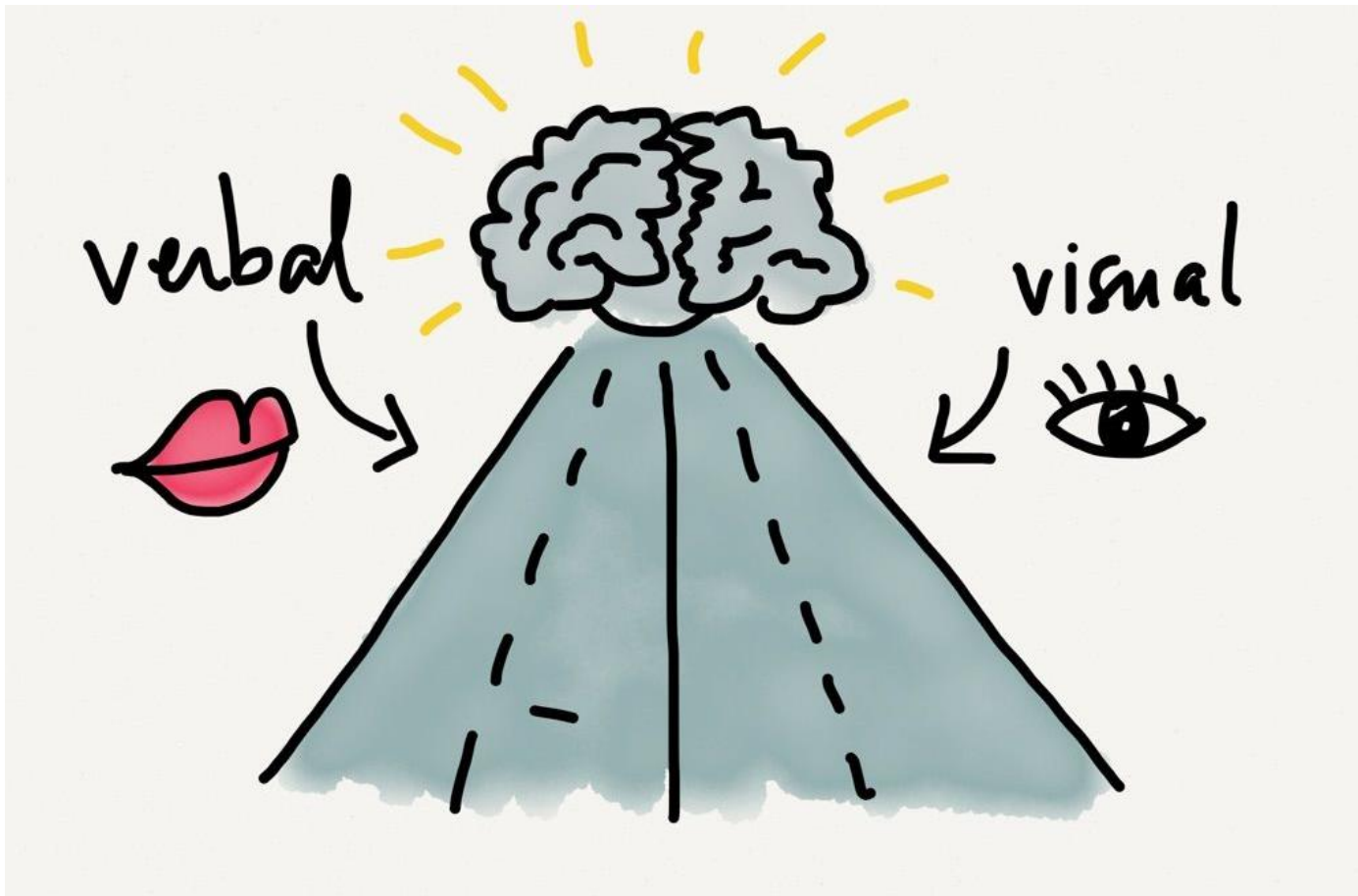
Information is stored here for a very long time.

Working Memory - Long term



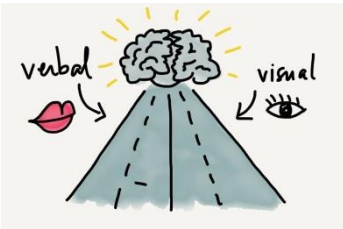
But transferring it from working memory to long term memory can sometimes be a challenge.

Dual Coding Theory

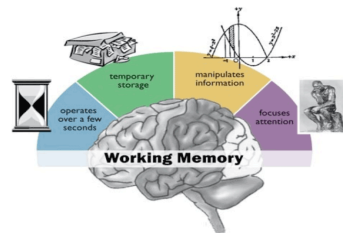


We receive information in 2 main ways...

MIND BLOWN!



1. Two lots of verbal information (E.g. reading from the PP and listening to the teacher talk) overloads us.



2. We are overloaded when there is too much information coming in because our working memory can't hold it all.

The definition of learning...

Definition: *A change in long term memory.*

**Our memory is endless.
So our learning is endless too.**

**Our mission in the ATLP is to maximise
learning efficiency and to ensure every
student achieves their potential.**

What does this mean for us?

Build opportunities to develop long term memory.

Repetition

***Do Now's revisiting
Red Zones***



How are we addressing this in our schools?

- Developing our curriculum to include planned and deliberate re-teaching and repetitive recall of key knowledge
- Using a range of strategies to prevent students from being overloaded and to maximise their learning
- Using **knowledge organisers** to support students revision of learning and retention in long term memory

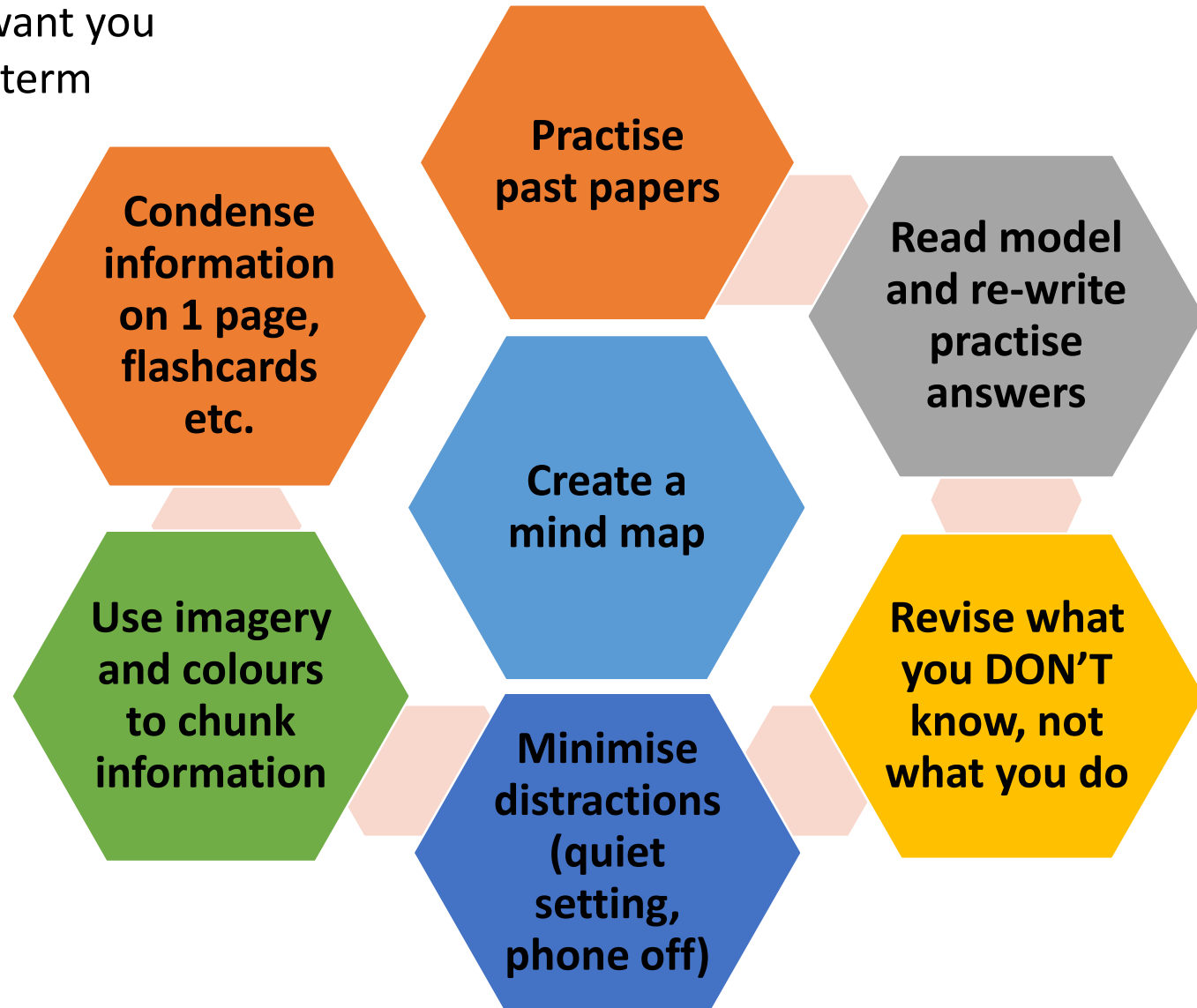
What can I do in my own time?

At Nether Stowe we want you to develop your long term memory through:

1. Note It

2. Map It

3. Quiz It



Questions from Texts, Teachers and Tests

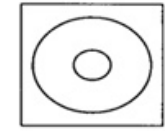
Thinking Processes

Thinking Maps as Tools

How are you defining this thing or idea? What is the context? What is your frame of reference?

DEFINING IN CONTEXT

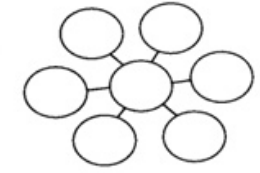
Circle Map



How are you describing this thing? Which adjectives would best describe this thing?

DESCRIBING QUALITIES

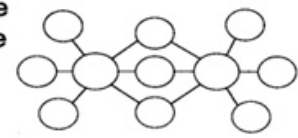
Bubble Map



What are the similar and different qualities of these things? Which qualities do you value most? Why?

COMPARING and CONTRASTING

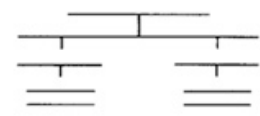
Double Bubble Map



What are the main ideas, supporting ideas, and details in this information?

CLASSIFYING

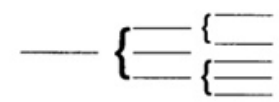
Tree Map



What are the component parts and subparts of this whole physical object?

PART-WHOLE

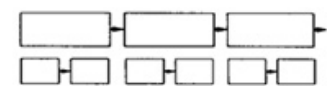
Brace Map



What happened? What is the sequence of events? What are the substages?

SEQUENCING

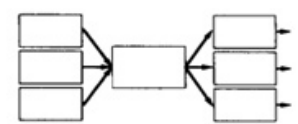
Flow Map



What are the causes and effects of this event? What might happen next?

CAUSE and EFFECT

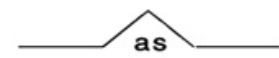
Multi-Flow Map



What is the analogy being used? What is the guiding metaphor?

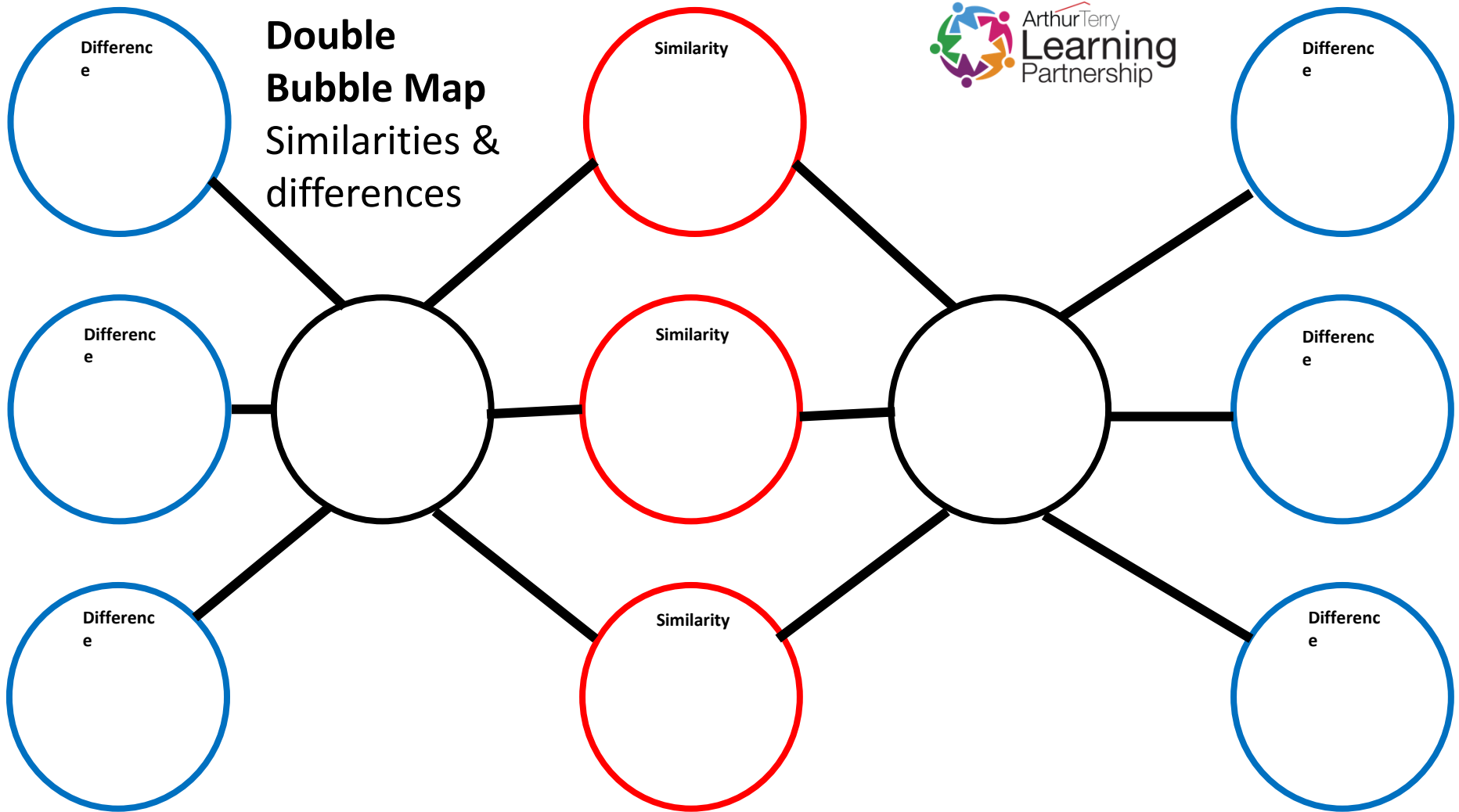
SEEING ANALOGIES

Bridge Map



2. Map It

Double Bubble Map Similarities & differences



The essential role you play

- Provide a quiet, comfortable place for your child to work at home. Encourage your son/daughter to see the value in a healthy diet and a good sleeping pattern. For example research shows that music doesn't assist with revision. It hinders!
- Help make sure your child's knowledge organiser is up to date and looked after.
- It takes time to form long term memory. Support them in starting early
- Help your child complete their self- quiz questions. Encourage your child to teach you!