SAVING WATER, SAVING LIFE

TEACHER'S PROJECT NOTES

3 ENTREPRENEURSHIP
EMPLOYABILITY
EDUCATION

PROJECT-BASED LEARNING | TERM 3 LIFE SKILLS PROJECT FOR SBA

basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Read to Lead
A Reading Nation is a Leading Nation

2030 NDP

GRADE 5

Table of contents

Dear Teacher

We have come a long way since January 2018 when the National Education Lekgotla announced that Entrepreneurship in Schools (EiS) was to become a national priority and that a programme should be set up to investigate how to prepare learners with thinking skills for a changing world.

EiS was rebranded as E³, as we felt that learners who were not able or keen to start an enterprise should not be excluded. Hence E³ was born: **E**ntrepreneurship, **E**mployability and **E**ducation for lifelong learning has become the pathway all learners in our country will follow as they find their place in the economy. Project-based Learning was the approach chosen as a method teachers would use for the first trial period, as PBL has been proven to unlock competencies learners of our century need to thrive in the world after school. These are very clearly indicated in the model on the following pages.

Thus, since 2018, E³ have been conducting trials in schools using the PPBL method as an approach, especially for Term 3 where the School-based Assessment is a Project. Thus, your work as a teacher has been prepared for you (you may, of course, change what does not work for you).

Provided herewith is a **Learner's Workbook** and a set of **Teacher's Project Notes for the School-Based Assessment (SBA) Task for Term 3**, as per the SBA Plan in Section 4 of the CAPS. These documents are specially created to support you as per the trimmed Annual Teaching Plan (Section 3) for Term 3. You will also be provided with the resources learners need to complete their projects

The Learner's Workbook and Teacher's Project Notes were created by DBE-E³, our unit at the National Department of Basic Education, and reviewed by our master trainers, who are leader teachers or district officials. For those schools that have been part of E³ in the past: you will notice that we have added a number of additional thinking skills to the original model – try to engage learners in these "thinking" sessions as this is where their growth lies.

We truly respect your apprehension during this time, and acknowledge your commitment. We appreciate all your hard work.

Enjoy unlocking play in your classrooms and encouraging a solution-seeking mindset in your learners – and remember that our learners look up to us – so let's walk the talk!

Good luck!

The E³ team

About Project-based Learning

Project-based Learning is a **learner-centered, teacher-guided** teaching method where learners learn by actively engaging in real world and personally meaningful projects. Project-based learning **connects** what learners learn in school to **real-world issues**, **problems**, and **applications**. If learning mirrors real-life contexts and equips learners with practical and useful skills, we argue that they are more likely to be **interested** in and **motivated** by what they are learning. This includes 21st century knowledge, work habits and character traits that are critically important to success in today's world.

Project-based Learning is **learner centered and teacher guided**, allowing for in depth investigation of a topic. There are three phases to our Project-based Learning approach.

Exploring the world (inquiry learning)

Learners are given an open question or problem, they then create and answer their own more focused questions, generating conceptual procedural knowledge in the process. At the same time, learners are developing their problem solving and critical thinking skills.

Teachers encourage learners to ask questions, scaffolding them through the investigation process and moving them beyond general curiosity into the realms of critical thinking and understanding.

Embracing the challenges (problem learning)

Learners work in teams to formulate complex, open problems rooted in the real world, and propose possible solutions.

Following a learner-centered approach, teachers scaffold the development of learners' ability to work collaboratively, be self-directed, and to think critically, promoting critical thinking skills, communication skills, and cooperation.

Designing the future (design learning)

The design phase integrates design thinking and the design process in the classroom. This phase is concerned with how solutions to complex problems might work in practice, in a context. Learners come up with solutions to complex problems by designing, building, and testing prototypes,
*(A “prototype” is a simple model that lets you test out your idea!) that solve some of the problems learners identified in the problem phase.

Welcome

Welcome to the grade 5 term 3 project. We all know that South Africa is a water-scarce country which means that this essential source of all life in the planet needs to be respected, protected and conserved. In this project, learners will create and present a project where they inform their peers about the importance of water, and motivate them to save and protect water.

This project is designed to develop the learners' thinking skills, but also to help us as teachers rate our own mindsets towards this new way of teaching – so please complete the “Before and After” table on the next page.

This project is aligned with the following requirements of the ATP for Life Skills.

ATP CAPS alignment

ATP Assessment

Health and environmental responsibly

- Water as an important basic need: – Importance of water – Different ways of saving water
- Different ways of protecting the quality of water
- Reading about the importance of water and how to save and protect the quality of water: recall and relate

This is merely a suggestion for a project and is not cast in stone – change parts of it to suit your context but ensure that you cover the steps and that you achieve the prescribed ATPs.

Launch the project at your school by asking the principal to announce the Project Exhibition Day at the end of the term and ask learners to make posters about saving water to keep the theme alive. Any engagement by the learners in their project topic will embed knowledge.

Have fun!

Project planning table

TERM 3					
ACTIVITY	DESCRIPTION	CAPS ALIGNMENT	RESOURCES	ENRICHMENT ACTIVITIES	ASSESSMENT & INTEGRATION WITH OTHER SUBJECTS
1.	PRIOR KNOWLEDGE. Learners play Hot p\potato game where they share prior knowledge about the importance, uses and sources of water.	Health and environmental responsibly	Learner's Workbook		English HL English FAL
2.	NEW KNOLWEDGE: Team quiz: In groups, learners compete in a team quiz. The questions relate to a variety of aspects of water.	Health and environmental responsibly	Learner's Workbook	Learners can create their own questions. Fact sheet can be used as a reading/listening comprehension.	English HL English FAL
3.	ORDER: interviews with family are conducted and data collected on a survey.	Health and environmental responsibly	Learner's Workbook	Water usage can be calculated in litres.	English HL English FAL
4.	APPLY: Findings are presented to the class as a public service announcement, a TV news report or a community radio interview.	Health and environmental responsibly	Learner's Workbook	Reports can be written for language assessment.	English HL English FAL
5.	DEFINE: Learners discuss and decide how to research and collect information on water use and awareness in the school.	Health and environmental responsibly	Learner's Workbook		English HL English FAL
6.	EXPLORE: Learners use research tools to collect information.	Health and environmental responsibly	Learner's Workbook		English HL English FAL
7.	BRAINSTORM: Based on the research, groups brainstorm possible plans to improve water awareness in the school.	Health and environmental responsibly	Learner's Workbook		English HL English FAL
8.	PRESENT: The various plans are presented to the class for peer review.	Health and environmental responsibly	Learner's Workbook	Learners can construct their own peer review questions.	English HL English FAL
9.	EVALUATE: Each group makes a final decision on what plan to action. This plan is the project.	Health and environmental responsibly	Learner's Workbook		English HL English FAL
10.	PROTOTYPE: Learners build or make a prototype of their project.	Health and environmental responsibly	Learner's Workbook		English HL English FAL Creative Arts

Project planning table (continued)

TERM 3					
ACTIVITY	**DESCRIPTION**	**CAPS ALIGNMENT**	**RESOURCES**	**ENRICHMENT ACTIVITIES**	**ASSESSMENT & INTEGRATION WITH OTHER SUBJECTS**
11.	FEEDBACK: Groups get feedback on their prototype.	Health and environmental responsibly	Learner's Workbook		English HL English FAL
12.	INTEGRATE: Feedback is integrated into final production of the project. Sneak previews of projects are developed in the MADD space (Music, Arts, Dance and Drama).	Health and environmental responsibly	Learner's Workbook		English HL English FAL Physical Education
13.	PRESENT: projects presented for the public. Groups participate in Q&A to explain the what, why and how of the projects.	Health and environmental responsibly	Learner's Workbook		English HL English FAL

PART 1 EXPLORING THE WORLD

Driving question: Where does our water go?

Prior knowledge

Thinking and sharing what you already know

Purpose of this activity step: Using a game called Hot Potato, learners will think about, share and write down their knowledge of the many ways water touches their lives. This will start them thinking and talking about the importance of water.

1. To prepare for this step, print/copy the 6 Thinking Maps (in your resource pack) on large pieces of paper that learners can write on. Each map covers a different topic related to water (how we use water every day, water sources, ways to save water, what pollutes water, staying safe around water and the importance of water to the planet.)
2. Arranged learners into six groups. Give each group one thinking map.

It's always a good idea for the group members to quickly choose a scribe to write down the ideas before starting the activity.

3. On the word GO, use a timer and give the groups two minutes to share what they know about their topic by writing ideas down onto the circle map.
4. When the two minutes are up, groups swap around the thinking maps quickly, as if they are hot potatoes. Learners then get another two minutes to share and write down what they know about the new topic. They cannot repeat any information. Swap and play until each group has had a chance to brainstorm each topic.

Did you know, the brain loves colour and a learner will concentrate be1er if information is colourful? Encourage groups to write down their knowledge in different, bright colours.

5. After playing the game, display the thinking maps in the classroom to make the learners' collective knowledge visible.
6. Ask learners to reflect on this game, e.g. did they enjoy the game, did they find it useful and what did they learn about the importance of water?
7. To conclude, refer learners to ***Worksheet 1: Water Circle thinking maps*** in the Learner's Work- books. Each learner needs to complete all six Circle thinking maps. This is an ideal homework activity.

This is quick for you to review – simply looking at the Circle maps will immediately alert you to who needs extra help.

New knowledge

Build on what you already know and add new knowledge

Purpose of this activity: In this activity, learners will be introduced, through a team quiz competition, to new knowledge about water. This will expand their understanding and knowledge about water as a basic need, the need to save water and the importance of protecting the quality of water.

Team quiz competition

8. Learners will stay in their groups as these will be the competition teams. Group members can create a team name relating to water.
9. Refer learners to ***Worksheet 2: Thirsty for knowledge*** in the Learner's Workbooks.
10. Give the teams time to read through and understand the facts about water presented on the worksheet. This information will be used to help the teams answer questions.
11. Start the quiz. Ask each team a question. A correct answer scores a point. If you see learners collaborating and helping each other you can add extra points.
12. This is a list of question you can use for the quiz. These are guidelines. Feel free (and encourage your learners) to create other questions – and even bring in more new information from the resource pack.

True or false questions

Using the worksheet, learners collaborate to work out if the statement is true or false . If false, they must give the correct fact to earn a point.

a) Every time it rains, new water is made. – *False, water is a finite resource- it can "finish".*
b) There is no water at all in deserts. – *False, every living thing contains water.*
c) Malaria is linked to polluted water. – *True*
d) Polluted water can be cleaned easily. – *False, cleaning polluted water is slow and expensive.*
e) We can only use about 2% of the water on earth. – *True*

Answer and Question

This is a back-to-front style of questioning. You give the answer and learners collaborate to work out the question that suits the answer. (There can be more than one question.) If there is time, this is an excellent language development activity because question formation is the beginning of higher order thinking.

a) The answer is '75%'. What is the question? – *How much of your body is made of water?*
b) The answer is 'the moon'. What is the question? – *What would the earth look like without water?*
c) The answer is '10 000'. What is the question? – *How many litres of water does it take to make one pair of jeans?*
d) The answer is 'tasteless'. What is the question? – *What does water taste like?*
e) The answer is 'dinosaurs'. What is the question? – *What ancient, extinct animals also drank the water we drink today*

Order

Order and categorise your existing knowledge

Purpose of this activity: Learners will use their prior and new knowledge to create a survey form to help them collect information in a systematic way that will help them find out where the most water is used in their home.

13. Refer learners to ***Worksheet 3: Where does our water go?*** in the Learner's Workbook.
14. Allow learners time to discuss what water use activities are relevant to their family. There are some ideas, but learners are encouraged to add in water use activities from their personal context.
15. Learners can refer back to ***Worksheet 1: Water Circle thinking maps*** in the Learner's Workbook to review all the knowledge shared in the circle thinking maps and the fact sheet.
16. Ensure learners understand how to complete the worksheet. This worksheet needs to be done at home. Allow learners to role play the survey in pairs if there is time. Help them create questions using the information in Column 1 by using question frames like: How oGen do you …? They should interview at least one person at home and then, when they next group in class, put the surveys together in order to complete ***Worksheet 3***.

A useful tip: after you have explained the activity, ask learners to explain the task to one another. You can assist with any confusion that peers cannot sort out for themselves.

Apply

Apply your knowledge to your context (driving question)

Purpose of this activity: In groups, learners collaborate and share their findings from the survey. They will use this information to answer the guiding question, "Where does our water go?"

17. Refer learners to ***Worksheet 4: This is where our water goes***.
18. Explain the activity i.e., they need to use the information discovered from the surveys to answer the questions on the worksheet. This will probably be a lively discussion as learners discuss, compare, evaluate and apply information.
19. Each learner should complete the worksheet, but the findings must be presented to the class. Have some fun with this. Encourage learners to present their answers by a Public Service Announcement, a television news report, a community radio interview, etc.

This is a good time to connect with the language teacher do – some cross-curricular teaching.

Public Service Announcement

Dear fellow South Africans. Do you know where your water goes? We, the grade 5 group, have done a survey and found that… We are sharing this information with you, the public because… Please help us save water by…

Television news report

Good evening viewers. We start with breaking news....

Community Radio Interview

Good evening listeners, this is your host_____. Tonight, on our Water Wise programme, I will be interviewing_____about a survey done at their school. Welcome_____.

PART 2 EMBRACING THE CHALLENGES

Driving question: How can we improve water awareness in our school?

Define

Ask lots of questions to help you define your problem

Purpose of this activity: Having researched water usage in their own homes, and in the class, and seen for themselves how important water is and where it is used most, learners will now take their research into the wider school community.

20. Still in their groups, learners need to discuss and define what they want to research about water awareness and conservation in the school. Each group will come up with something different which is exactly what should happen in PPBL.

Here are some ideas for learners to consider:

- What part of water conservation do we want to know more about? This activity can be quite physical like checking every tap on the school ground to see if it's dripping, or more general like “10 ways we can start saving water today”
- How will we collect the information (questionnaires, interviews, surveys, etc.)?
- How many learners will we involve in the research?
- Will we stay in one grade, phase or the whole school?
- Will we include teachers?
- Which group members will be responsible for which task?
- How long will this probably take?

Explore

Consider different points of view to help you understand more

Purpose of this activity: Learners will now do the research and collect information using the tools they chose. They analyse the information and do a quick feedback of their findings.

21. Learners, following Covid-9 safety protocols, go ‘out into the field’ and conduct their research.
22. Each group can briefly (1 minute) give feedback on their findings. They can use a sentence frame such as the following: We researched and what we found out was_____

Brainstorm

Brainstorm as many solutions to your problem as possible

Purpose of this activity: Based on their research, each group has to brainstorm a plan to improve water awareness in the school.

23. In this step, explain the following project options to the class (details are in the resource pack).

Project Options

- Create a board game (see resource pack for ideas)
- Host a team quiz like the one the class played in the Inquiry phase.
- Present a water song and dance

This link takes you straight to the resource that explains a lively water music activity. The page is in the resource pack as well. Here is a summary of the idea: *h1p://www.waterwise.co.za/export/sites/water-wise/education/activities/respect- water/downloads/Water_-_Life_Blood_of_the_Earth.pdf*

Water Music

You will need:

- Five or six identical glass bottles
- A measuring jug
- Water
- metal spoon

Follow these steps:

- Fill all the bottles with different amounts of water – e.g. 50 ml for the first, 100 ml for the second, etc.
- Tap them with the spoon and listen to the different musical notes that each bottle makes. Try blowing across the neck of the bottles to make a note.
- These bottles can be used as part of a water song and dance project.
- Make sure the water is not wasted After the activity.

24. Groups need to choose one of the project options. Alternatively, the class can regroup according to individual choice i.e. learners who want to host a team quiz can work together.
25. In their groups, learners need to brainstorm a possible plan for their projects.

Present

Present the point of view and options to an audience

Purpose of this activity: Groups will present the possible project plans to the class for comment.

26. Each group needs to present their possible plans for their projects for comments from the class. Refer learners to ***Worksheet 4: Peer review*** to guide their comments and feedback.

PART 3 DESIGNING THE FUTURE

Apply and make

Evaluate

Evaluate and select your best solution

Purpose of this activity: Based on the feedback from the Present step, learners make a final decision on their project.

27. Each group needs to evaluate the feedback they received through the peer review. Using this advice, they can improve on their projects and decide on a final plan.

Prototype

Make the prototype of your best solution

Purpose of this activity: Build or make the prototype based on the design

28. To begin this step, give learners the assessment rubric. Knowing exactly what is required of them will help guide their planning.
29. Learners collaborate to create their prototype. This is likely to be draft sketches, draft lyrics, mock- up models, etc. They need to keep the assessment criteria in mind and check that all outcomes are included in their project.

Feedback

Speak to experts or the community to get REAL feedback

Purpose of this activity: Learners get feedback from a wider community of people about possible improvements or design changes

30. Learners show their projects to family members, learners in other grades, teachers, and if possible, members of the community for comment and feedback.
31. The prototypes are tweaked (depending on the feedback) and the projects are made or practiced and finalised. These projects can take any form: a Tippy-Tap, an illustrated poster or a role-play. Just ensure that all the information required by the rubric comes out clearly.

Integration

Integration in The MADD Space – present your work using Music, Art, Drama, Dance

Purpose of this activity: To iterate learning in a fun way.

32. Learners can also create a quick and impactful way of advertising their projects and giving other learners a 'sneak preview' of what to expect. Encourage learners to 'play' in the Music, Art, Dance and Drama MADD space and use a song, advert, intercom announcements, etc.

This is another cross curricular opportunity as the MADD space links well to Creative Arts.

Integration with other subjects

In term 3, English (HL) learners have to write instructions for how to write a project. This list of criteria from the CAPS may be a useful way to help learners plan and make their prototypes.

CAPS Term 3 Writing and presenting

Writes instructions (how to write a project)
- *Selects relevant information*
- *Uses correct specific details*
- *Uses correct sequence*
- *Uses correct format*

Uses the command form of the verb and imperatives

Uses appropriate grammar, spelling and punctuation

Uses the writing process
- *Planning / pre-writing*
- *Drafting*
- *Revising*
- *Proofreading*
- *Presenting*

Present

Public exhibition

Purpose of this activity: Present and celebrate the products.

33. The public exhibition and celebration is the big day you will have announced at the launch of the project.
34. Each group needs to present their project and be prepared to explain a) the reason for the project (WHY), b) the process of the project (HOW) and c) what they have learnt from the project (WHAT)
35. After the excitement of the big day, learners need to take some quiet time to reflect on their projects.
36. Refer them to ***Worksheet 5: My reflection on my learning***.

Appendix – Thinking Maps

These resources have been created by Thinking Schools South Africa at admin@thinkingschools.org.za

THINKING MAPS APPLICATION TIPS

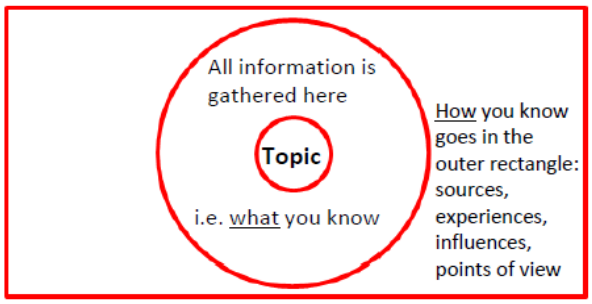
When you are **Defining...**

Key Words used	Questions asked	Applications
Tell me everything you know about this topic, List, Define, Note the key points, Name all the types (of fractions, forces, habitats, plants, animals, qualities, points of interest) in this topic. Brainstorm, discuss.	What do you think this word means? What did we learn about this topic? What are the main issues raised in this video/book? What are all the points you want to make (or learn) about this topic? What are all the ways of getting to this answer/number?	Formative Assessment of what students already know about a topic. This includes misconceptions, which you can be aware of. A starting point to gather all ideas – firstly your own, and then perhaps more from peers, video or written material; or pre and post revision.

...then the Thinking Map to use is

Note: You can use the Circle Map to measure growth in your thinking, such as checking and self-correcting information that is incorrect and adding new information in a different colour.

THE CIRCLE MAP



When you are **Describing...**

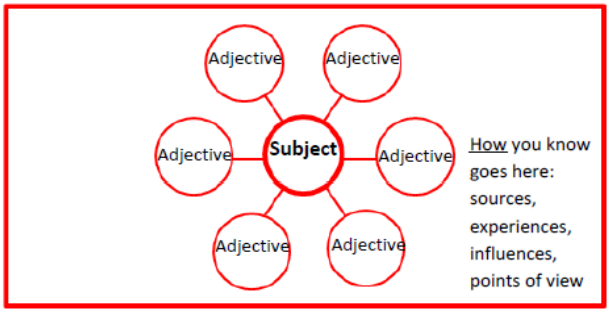
Key Words used	Questions asked	Applications
Describe feelings, attributes, characteristics, properties, adjectives, qualities. Use each of the 5 senses to explain how it feels, smells, sounds, tastes, looks.	How would you describe this in your own words? What is this really like? Which words would paint a vivid picture of it in your mind?	Generate rich and original adjectives before writing – to describe a setting, a character, or situation. Considering the properties of materials or visuals in Natural Science, Design and Technology or Art.

...then the Thinking Map to use is

Note: The Bubble Map is for adjectives only.

It is not a Spider Diagram! (If you are looking for a Spider Diagram, either collect main ideas in a defining Circle Map or main headings in a classifying Tree Map, in which case you can also add sub-points under those headings).

THE BUBBLE MAP



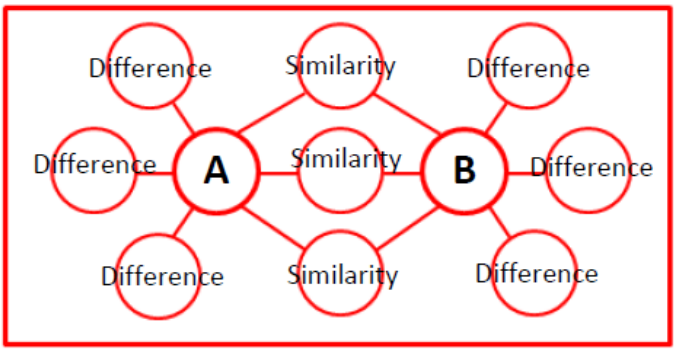
When you are **Comparing and Contrasting...**

Key Words used	Questions asked	Applications
Compare/contrast, discuss similarities/differences, distinguish between, differentiate, what things/concepts have in common or not.	What are the similarities and differences between A and B? What do they have in common? What is unique to only one of them? What distinguishing features help you identify them from each other?	Compare and contrast characters in a book/film, two shapes, methodologies, countries, time periods, formulae, technologies, types of plant or animal. Clarifying identifying properties that enhance understanding of forms, functions, applications and meanings.

...then the Thinking Map to use is

Note: Be careful to connect the lines to the rights places, based on the properties that link or differentiate A and B. Use the most striking or meaningful similarities and differences without mechanistically mirroring them (e.g. tall and short may be less distinguishing than that A is gangly and B is well-dressed). A and B can have different numbers of differences.

THE DOUBLE BUBBLE MAP



When you are **Classifying...**

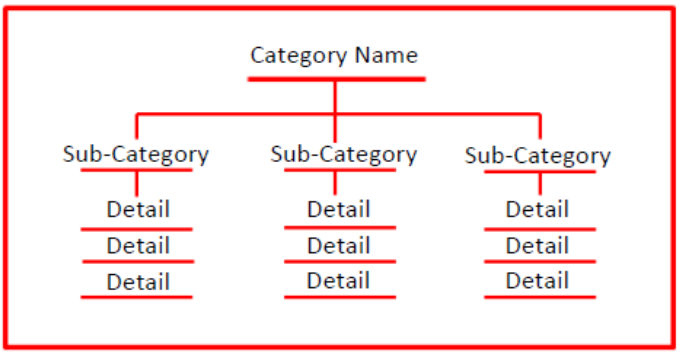
Key Words used	Questions asked	Applications
Classify, sort, group, categorise, give related detail, types of, kinds of, list and elaborate, taxonomy	How might you group the main ideas, supporting ideas and details in this topic? What are the key headings in this unit of work/project/talk/essay? Can you sort all the information you have gathered into key concepts? What important details do you want to add under each heading?	Making notes or summaries in any content area – students think about the category headings and the details of what they learn. Categorising information from a Circle Map in preparation for writing about a topic or giving an oral presentation. Collecting information under predetermined headings whilst reading a text.

...then the Thinking Map to use is

Note: Be careful to draw the Tree Map exactly as structured here.

You can use the Tree Map to give students an overview of a subject, to see what is coming up and how units of work fit in. It is also extremely useful for revision.

THE TREE MAP

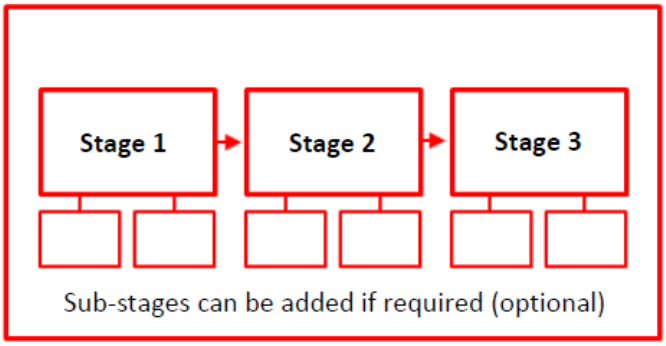


When you are **Sequencing...**

Key Words used	Questions asked	Applications
Sequence, map the steps in this project, put in order, order, recount/re-tell, what happens next, cycles, patterns, processes, change, solve multi-step problems	What is the process/project you are sequencing? What is the step-by-step sequence of events in the process/project? What are the sub-stages? Is each step in the right order?	Mapping a sequenced step-by-step project in PBL. Life Cycles and processes in Natural Science/Social Science. Time lines in history. Planning the sequence of a story for writing/recording the sequence of a story. Recording a thought process, such as in problem solving.

...then the Thinking Map to use is

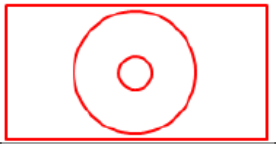
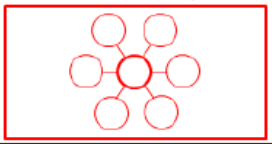
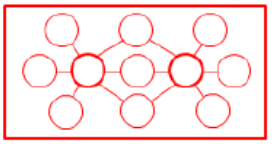
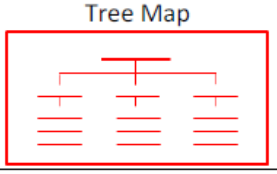
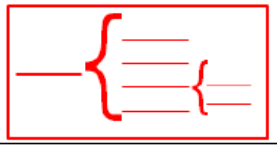
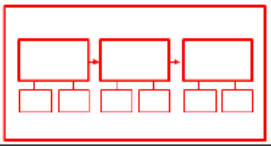
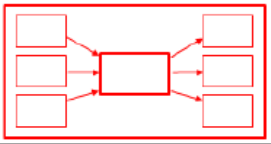
THE FLOW MAP



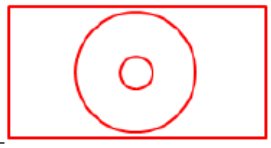
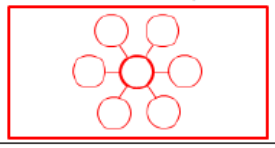
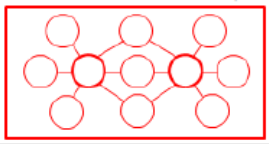
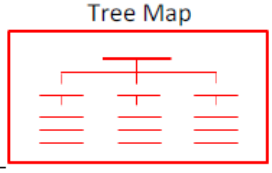
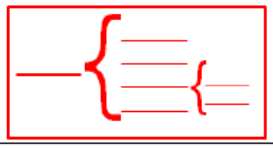
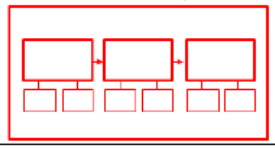
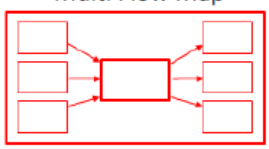
Note: Make sure that the Flow Map has arrows showing the order of events/stages. For life cycles it becomes a circle.

General Note: Whilst it is vital to apply the Thinking Maps with the elements of each map exactly as they were designed, please don't squeeze student thinking to the size or number of circles or blocks. Freehand maps that are corrected as they develop, capture more expansive thinking!

THINKING MAPS OVERVIEW

Questions →	Thinking Process →	Thinking Map
Tell me everything that you know about this. How are you defining it? What is your context? What is your frame of reference?	**Defining in Context**	Circle Map 
How would you describe this object/idea/person? Which adjectives would you use?	**Describing**	Bubble Map 
What are the similarities and differences?	**Comparing and Contrasting**	Double Bubble Map 
How might you group the main ideas, supporting ideas and details?	**Classifying**	Tree Map 
What are the parts that make up the whole object? Can the parts be broken down into sub-parts?	**Part-Whole Relationship**	Brace Map 
What is the sequence of events? What are the sub-stages?	**Sequencing**	Flow Map 
What are the causes and effects?	**Cause and Effect**	Multi Flow Map 
What is the analogy being used for?	**Seeing Analogies**	Bridge Map 

KEY THINKING WORDS

THINKING MAP	THINKING PROCESS	KEY WORDS
Circle Map 	**Defining in Context**	Context, context clues, list, define, tell everything that you know, brainstorm, tell about, explore the meaning, discuss
Bubble Map 	**Describing**	Describe, use vivid language, observe using 5 senses, describe feelings, attributes, characteristics, properties, adjectives, qualities
Double Bubble Map 	**Comparing and Contrasting**	Compare/contrast, discuss similarities/differences, distinguish between, differentiate
Tree Map 	**Classifying**	Classify, sort, group, categorise, give sufficient and related details, types of, kinds of, list and elaborate, taxonomy
Brace Map 	**Part-Whole Relationship**	Parts of, take apart, show structure, physical components, anatomy,
Flow Map 	**Sequencing**	Sequence, put in order, order, recount/re-tell, what happens next, cycles, patterns, processes, change, solve multi-step problems
Multi Flow Map 	**Cause and Effect**	Causes and effects, discuss consequences, what would happen if, predict, change, identify motives, why, results, outcomes, benefits
Bridge Map 	**Seeing Analogies**	Identify the common relationship, guess the rule, interpret symbols, simile, metaphor, allegory, ratio