SPECIAL

Pets

3 ENTREPRENEURSHIP

EMPLOYABILITY

EDUCATION

PLAYFUL PROJECT-BASED LEARNING | TERM 3 LIFE SKILLS PROJECT

basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Read to Lead
A Reading Nation is a Leading Nation

NDP
2030

GRADE 1

Dear Teacher

Reducing the extremely high levels of youth unemployment is E^3's compelling goal and is at the heart of the E^3 Playful Project-based Learning (PPBL) approach. The outcome of this programme is to equip learners with solution-seeking mindsets so they can achieve one, or more, of the three E's - become Entrepreneurs, follow a path into higher Education or become Employed.

Foundation phase learners are many years away from leaving school and finding their way in the big, wide world. They are the lucky ones because if they are exposed to an educational approach that is engaging, interesting and relevant, they are sure to leave school well equipped to participate in the modern economy.

So, what educational approach stimulates learners' engagement and interest and equips them with relevant skills and competencies? The answer is Playful Project-based Learning (PPBL).

The E^3 PPBL Foundation Phase projects have at their core a play-based approach as it is through play that children's curiosity, motivation and lifelong love for learning is activated. The PPBL projects are designed to bring maximum fun and learning to the classroom – for teachers and learners. Each project is like an onion and contains layers and layers of learning. When implementing the projects you will:

• Bring the CAPS to life and realise its intended outcomes.
• Promote thinking, connection and empathy – critical competencies for a changing world.
• Encourage problem-seeking and problem-solving skills.
• Stimulate the holistic development of each learner.
• Foster a lifelong love of learning.

At the end of each project we hope learners have had such a great experience that they keep coming back for more.

We hope you enjoy unlocking play in your classroom and encouraging a solution-seeking mindset in your learners.

Good luck and remember to have fun!

The E^3 team

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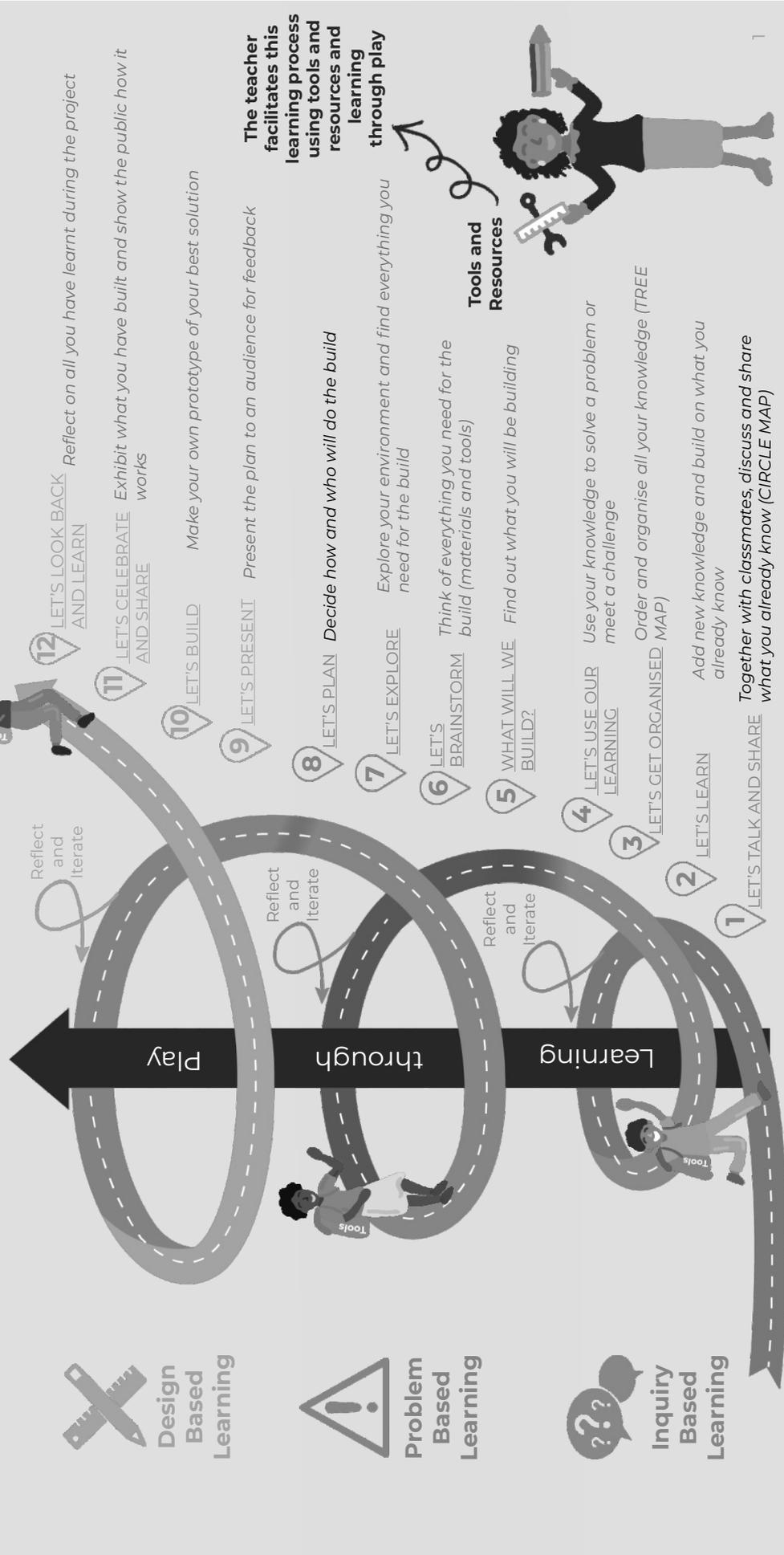
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7. LET'S EXPLORE — *Explore your environment and find everything you need for the build*

6. LET'S BRAINSTORM — *Think of everything you need for the build (materials and tools)*

5. WHAT WILL WE BUILD? — *Find out what you will be building*

4. LET'S USE OUR LEARNING — *Use your knowledge to solve a problem or meet a challenge*

3. LET'S GET ORGANISED — *Order and organise all your knowledge (TREE MAP)*

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COMPETENCIES FOR A CHANGING WORLD
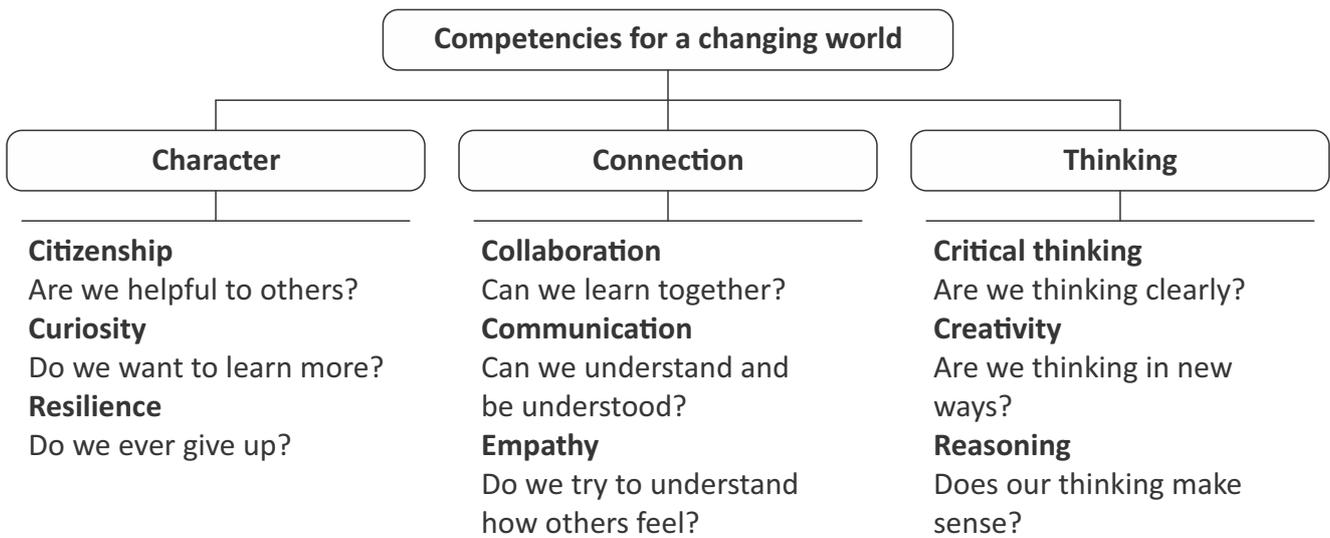
"Thriving in today's fast changing world requires breadth of skills rooted in academic competencies such as literacy, numeracy and science, but also including such things as teamwork, critical thinking, communication, persistence, and creativity." (*Skills for a Changing World: Advancing Quality Learning for Vibrant Societies McGivney E. , Winthrop W. 2016*)

E³ has focused on three competencies, Thinking, Connection and Empathy all of which are unlocked and learnt through the Playful Project-based Learning process. This unlocking and learning is designed to be experiential i.e. the learning is in the doing. Activities within each project constantly urge learners to think, connect and empathise. This tree map shows the competencies in more detail.

Competencies for a changing world

Character	Connection	Thinking
Citizenship Are we helpful to others?	**Collaboration** Can we learn together?	**Critical thinking** Are we thinking clearly?
Curiosity Do we want to learn more?	**Communication** Can we understand and be understood?	**Creativity** Are we thinking in new ways?
Resilience Do we ever give up?	**Empathy** Do we try to understand how others feel?	**Reasoning** Does our thinking make sense?

It's easy to forget about competencies in the busyness of a school day. Making a competency spinner is a fun and easy way to keep engaging with these essential behaviours. You, or better still, your learners can make competency spinners. Keep a big spinner on the wall. Spin it weekly to see what competency to focus on – and acknowledge when you see these behaviours in your learners. They will catch on quickly and start to recognise the various competencies in their peers and most importantly in themselves.

MEASURE WHAT YOU TREASURE: COMPETENCIES FOR A CHANGING WORLD

The Playful Project-based Learning approach is being implemented to better equip learners to cope in a rapidly changing world outside of school. Being equipped means creating opportunities where learners can develop competencies such as Connection, Communication and Thinking that contribute to a solution-seeking mindset. This changing approach to teaching and learning must be supported by a shift in mindset towards what we assess and measure. It is no longer enough to only assess CAPS content, we need to also be looking for and acknowledging behaviour and actions that reflect competency-based behaviour.

To guide you as you start on this journey of learning, a competency checklist called **Measure what you treasure: Competencies for a changing world** has been included in the Teacher's Resource Pack. This will focus your observations and assist your rating of learners' competency development that, collectively, characterise what Playful Project-based Learning (PPBL) looks like in South African classrooms.

WHAT IS SO SPECIAL ABOUT S.P.E.C.I.A.L.?

It's no secret that humans learn best through play. When we are enjoying a task, even if it is extremely challenging, we are likely to become deeply engaged in the process, and ultimately achieve a positive outcome.

What does playful learning look like?

The Lego Foundation, (http/www.legofoundation.com) highlights five characteristics of playful learning. If the activities experienced by learners are **meaningful, joyful, socially interactive, actively engaging** and **iterative** they can be considered playful.
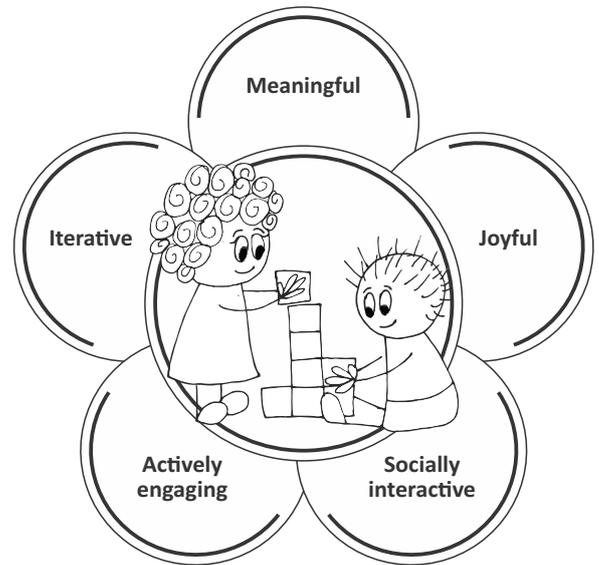
Being deeply committed to bringing out the PLAY in the Playful Project-based Learning process, E³ has used these five characteristics and added two unique elements that, collectively, characterise what playful learning looks like in South African classrooms.

What does play look like in South Africa?

The 7 Essential Characteristics of Playful Project-based Learning

	S	P	E	C	I	A	L
Learning spaces that:	Enable Social Interaction	Create a sense of Purpose	Are Enjoyable	Inspire Curiosity	Encourage Iteration	Foster Active Engagement	Are Learner Centred
ENABLE	Group work, solving problems together, learning from each other, choice in working independently or in groups	Choice, authentic real-life problems. Ongoing projects	Choice, learning through song, dance, movement, drama, inside and outside the classroom.	Opportunities to explore, investigate, follow interests	Explore problems try, fail, reflect and try again, develop and grow. No 'right' answers	Learner voice and choice in learning.	Learners at the core of the learning cycle.
DEVELOP	**Connection competencies** Collaboration Communication Empathy	Ownership, agency and self-efficacy. Intrinsic motivation	**Thinking competencies** critical thinking, creativity reasoning	Intrinsic motivation Curiosity	**Character Competencies** Resilience	Agency Intrinsic motivation Self Efficacy	**Character** Citizenship Curiosity Resilience

Ensuring the whole child development	COGNITIVE	CREATIVE	SOCIAL	PHYSICAL	EMOTIONAL

Challenge yourself: Create a S.P.E.C.I.A.L. banner for your classroom. Reflect on it through the day. If even one characteristic is evident in your learners then you can be sure you have started to create a positive and playful learning environment.

Grade 1 project summary

	SPECIAL	
S	Social Interaction	
P	Purpose	
E	Enjoyment	
C	Curiosity	
I	Iteration	
A	Active Engagement	
L	Learner centred	

Inquiry-based Learning
is an active learning method that involves learners asking questions about a topic, triggering learners curiosity and engagement in a topic

1 LET'S TALK AND SHARE — *Think about what you already know*
Learners discuss and share what they already know about the topic of pets.

2 LET'S LEARN — *Building on what you already know and add new knowledge*
Learners are introduced to new information about the topic to add to their prior knowledge of pets.

3 LET'S GET ORGANISED — *Order and organise all your knowledge (TREE MAP)*
Learners create pet-specific stories on paper that are organised into a large version of a tree map and then collated into a book.

4 LET'S USE YOUR LEARNING — *Use your knowledge to solve a problem or meet a challenge*
Learners are challenged to think of and present for the class creative and imaginative conversations between two different animals.

Reflect and Iterate

Problem-based Learning
Learners work in teams to formulate complex, real-world problems, and propose possible solutions. Real world problems are the tool for learners to investigate and develop their understanding of the CAPS curriculum.

5 WHAT WILL WE BUILD? — *Find out what you will be building*
Learners are introduced to the project which is to build a pet shelter. They are shown pictures of three-dimensional pet shelters as a guide for their own designs.

6 LET'S BRAINSTORM — *Think of everything you need for the build (materials and tools)*
Learners brainstorm what they might need in terms of material and tools, to build their pet shelters.

7 LET'S EXPLORE — *Explore your environment and find everything you need for the build*
Learners explore for example, their classrooms, school grounds, and homes for the materials they need. These must be largely found materials and items.

8 LET'S PLAN — *Decide how and who will do the build*
Learners plan and sketch a design or make a prototype of their pet shelters.

Reflect and Iterate

Design-based Learning
Learners produce solutions to complex problems by designing, building, and testing prototypes (a "prototype") that solve some of the problems learners identified in the problem phase.

9 LET'S PRESENT — *Present the plan to an audience for feedback*
Learners present their plans and designs to their peers for feedback and iteration.

10 LET'S BUILD — *Use your knowledge, materials and tools to build the project*
Learners build their pet shelters in line with their iterated plan, using all the materials they collected.

11 LET'S CELEBRATE — *Exhibit what you have built and show the public how it works*
Learners use song and dance to open the exhibition of the pet shelters. They explain how the shelters were built and answer any questions from the public.

12 LET'S LOOK BACK AND LEARN — *Reflect on all you have learnt during the project*
Learners reflect on the process of the project using a set of reflection questions to guide their thinking.

Reflect and Iterate

THINKING MAPS: MAKING THINKING VISIBLE

Thinking maps are a simple yet highly effective tool that are wonderfully versatile and can be adapted to suit many ages and contexts . There are eight types of thinking maps, but only two types are used in the Foundation Phase projects, the Circle Map and the Tree Map. (More information on Thinking Maps is available in the Teachers Resource Pack.)

Circle Maps

How to use them

- Write the topic in the centre

- Write/draw what you already know about the topic in the big circle

- Write/draw how you know what you know in the rectangle
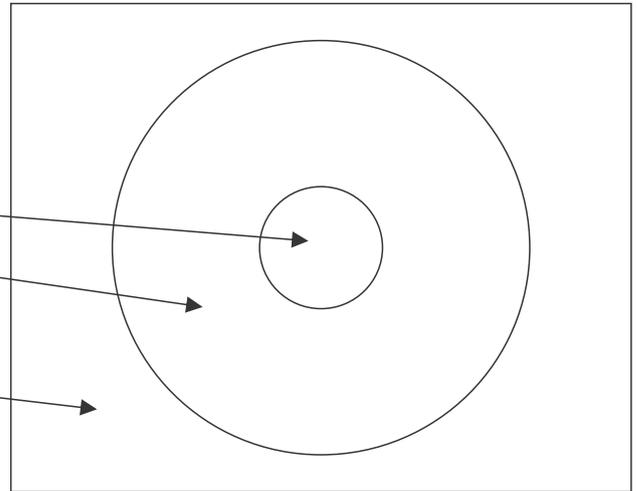
When to use them

Circle maps are used whenever you want to capture brainstorm-like activities. They are used in the first step of almost all the E³ projects where learners think, discuss and share what they already know about a topic and then write or draw this knowledge onto the map. This is a way of establishing learners' prior knowledge. Here are four ways you could use a circle map in your classroom.
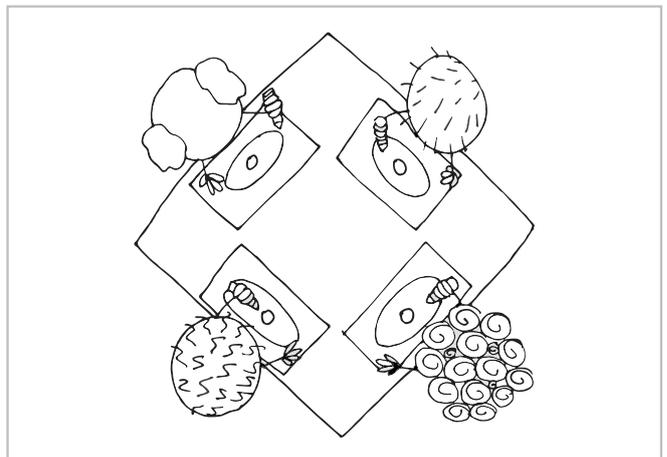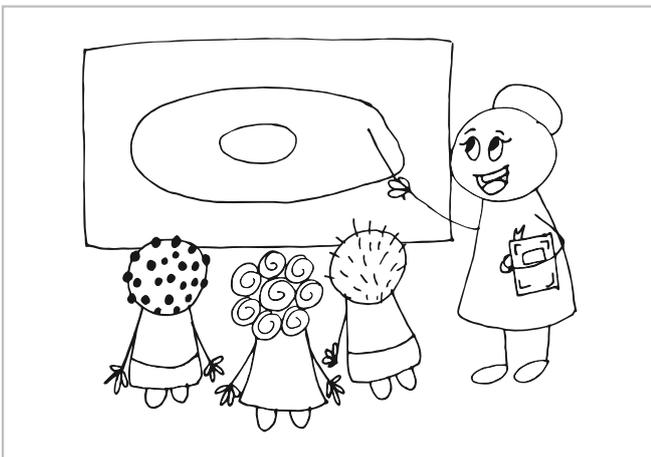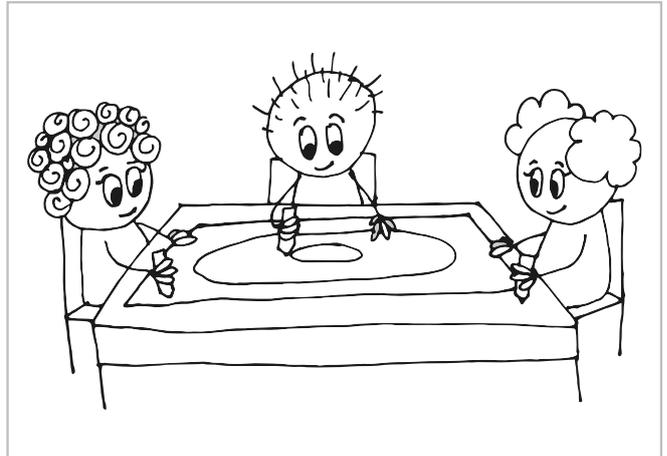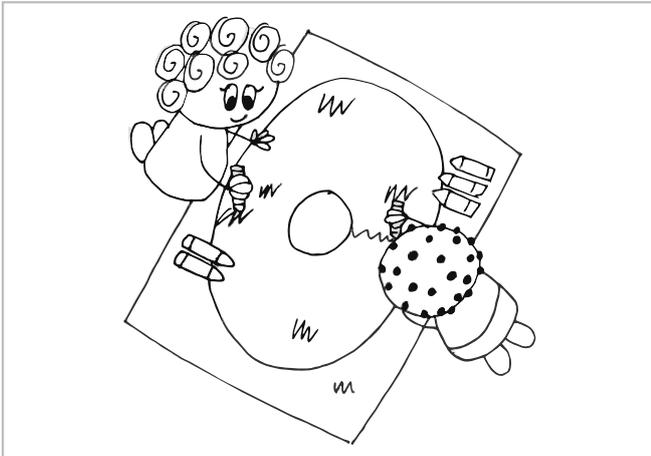
Tree Maps

Tree Maps are used to organise information from a circle map activity into conceptually similar groups.

- The main topic goes here

- The subtopics go under the main topic (There can be as many subcategories as learners can think of)

- Information relevant to the subtopic is listed here
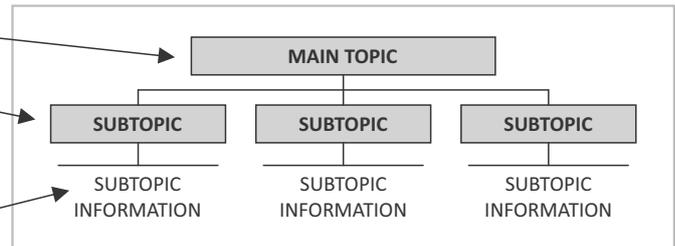
Although the Thinking Map templates are available for printing, it is great when learners draw their own. In this way they don't depend on a worksheet, but learn a portable skill they can use at home.

CAPS ALIGNMENT

Grade 1 Life Skills: Beginning knowledge, personal and social well-being.
Term 3. Topic: Pets. *Can learner demonstrate knowledge of the animal we can keep as pets, how to look after pets at home including shelter, food, water and cleanliness, and proper care and treatment of animals.*

1	2	3	4	5
Learner appears unfamiliar with pets and has not learnt by observing others with pets. Learning is rote with little meaning. Learner cannot link learning to an imagined context. e.g. cannot explain, "If I had a pet I would care for it by…"	Learner can differentiate between animals that can and cannot be pets but not always reason why. Understanding of pet care is growing and learner can explain the basics about pet care. Learner is curious and enjoys listening to stories about pets.	Learner's understanding of pets is developing well and learner can describe the care of different types of common pets. Can also give reasons as to what animals are inappropriate as pets, e.g., can explain why we don't keep lions as pets. Learner is aware that cruelty to animals is wrong.	Knowledge of the topic is good. Learner can differentiate between cruel and kind treatment of animals. Learner can also describe the benefits of having a pet. Learner has been observed to explain pets and pet care to peers who are struggling.	Learner has an excellent grasp of this topic and applies learning to the care of a pet at home. Learner is sensitive to animal abuse and can reason why it is wrong. Learner has expanded own knowledge through, for e.g., reading books or even visiting local animals shelters.

PROJECT PLANNING AND PREPARATION GUIDELINES

These are some guidelines to help you prepare for implementing the project.

PROJECT PLANNING AND PREPARATION CHECKLIST	
Collect and store found and recycled materials.	☐
Ensure learners have the DBE Term 3 Life Skills workbooks in the Language Of Learning and Teaching (LOLT).	☐
Gather any resources you already have, and that your learners can contribute, to create a theme table or display about pets.	☐
If possible get hold of small toy plastic animals.	☐
Plain paper sheets (per group)	☐
Decide how you want to use the thinking maps and make and copy accordingly.	☐
Have a place, such as a project portfolio, where learners can store their thinking maps.	☐
Diarise a date when the pet shelter exhibition will take place. Invite lots of people and make it a true celebration.	☐
Plan your groups in advance and place learners together strategically. If group work is unfamiliar, then practise collaboration and group work skills through games and shorter activities.	☐
Think about a classroom management strategy. Decide on rules and that make the classroom an enjoyable learning space for everyone.	☐

STEP 1

Let's talk and share

1. Start this step with some warmup movements. Take learners outside and ask them to try to move like certain animals. They can:
   - 'Walk' on all fours slowly like a tortoise or speedily like a cheetah
   - Gallop like horses
   - Slither like snakes
   - Hop like rabbits
   - Swim like fish
   - Fly like birds
   - Crawl like crabs
   - Curl up and sleep like puppies
2. To add more fun, let some volunteers move and make a noise like their favourite animal which the other learners must guess.

CAPS *Cross-curricular connections*

The animal movement warm up is a fun way to start the project and links to physical education.

LIFE SKILLS
Physical education
Locomotor/non-locomotor
Move: jump, run, climb and crawl
Follow instructions to move slow and fast

3. Draw a circle map on a large piece of paper and place it on the board. Encourage learners to spend a few minutes thinking about their pets. Then facilitate some discussion and sharing time where learners share their knowledge and personal experiences of pets.
4. Write down what the learners share on the circle map.

Teaching tip: The Circle Map
There are a few ways to use the circle map. Please see page 7 for more ideas that may better suit your class size and learners' abilities.

NOTEPAD

Note your bright ideas here:

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STEP 2

Let's listen and learn

1. Organise your learners into groups. Refer learners to their DBE Life Skills grade 1, book 2, terms 3,4: page 10.
2. Allocate each group 1 of the pets in the picture. If snakes and chameleons are more unusual then add in more common animals that are kept as pets.
3. In their groups, learners need to share what they know about the care of that pet including categories such as food, water, exercise, grooming, shelter, training, how to keep them safe and where to get help if they get sick or hurt.
4. Structure the discussion by giving learners some time to share what they know within the group. One group member can then share what was learnt in the group with the whole class.
5. During the feedback you will see where there are knowledge gaps which is the perfect time to bring in new information about caring for pets.

Teaching tip: Learning through touch
Whenever touch is included in learning, more of the brain is stimulated which means better learning.
Bring touch into Step 2 by putting plastic toy animals into a bag. Give learners opportunities to feel the toys and, based on what they feel, say which animal it could be.

What animal can I feel?

Note your bright ideas here:

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STEP 3

Let's get organised

1. Start this step by collecting some data about which learners have what pets at home. Ask a question such as, "Stand up if you have dogs." Ask a few volunteers to count the learners who are standing. Write the number on the board.

CAPS *Cross-curricular connections*

This is a great opportunity to practise counting in ones.

MATHEMATICS
Numbers, operations and relationships
Count with whole numbers
Count from any number between 0 and 80.
Represent whole numbers
Recognise, identify and read number symbols 1 to 80

2. Use this data to help learners work out which are the most popular pets.
3. In groups, learners will now write and illustrate sentences to form a story on any one of the most popular pets to contribute to a book.
4. Each group gets one piece of paper. Learners need to include the following on their page:
   • A title or heading.
   • Each learner should contribute at least one illustrated sentence.
   • The sentences need to describe the pet i.e., the name, the colour of the fur, what it eats, where it lives and any other information they can think of.
5. When the groups have finished, you can first display them as a lovely big tree map with a main heading, subheadings, and the groups' pages under the appropriate subheadings. Thereafter they can be collected to form a book.
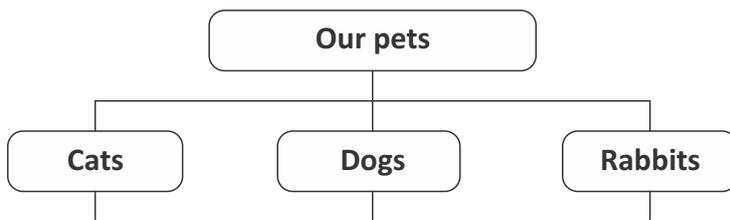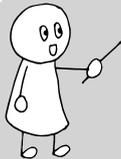
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              │  Our pets   │
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NOTEPAD

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Note your reflections here:

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STEP 4

Let's use our learning

1. In this step learners need apply their learning to a new situation.
2. Setting up a challenge is always useful for encouraging application.
3. For this challenge, learners work in pairs and create a creative and wildly imaginative conversation between any two animals - not only the pets they have been focussing on.

Teaching tip: Talking through puppets
These conversations can be enhanced using hand puppets. With enough imagination, even an ordinary sock can become a dinosaur!

Letting the puppets 'do the talking' can help shy or anxious learners feel more confident.
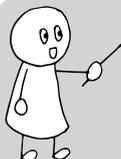
NOTEPAD

Note your bright ideas here:

Note your reflections here:

THE JOURNEY: STAGE 2

PROBLEM-BASED LEARNING

This step takes us into a new phase of the project which is problem-based learning. From here, learners take control of the project and use what they have learnt to solve a problem. This includes a lot of collaborative learning, where learners share ideas, make decisions, design plans and solve problems. Your role from here is to guide, facilitate and advise.

STEP 5

What are we building?

1. Organise the learners into groups of about 6. Learners can return to the groups they worked in for **Step 3. Let's get organised**, or you can reorganise the groups.
2. Then, introduce learners to the project and explain that they will work in their groups and collaborate to design and build a three-dimensional pet shelter for an animal. They have to build their shelter from mainly found or waste materials. As an extra challenge they could also make the pet (using clay or playdough) that lives in the shelter.
3. If possible, let each group decide the type of pet shelter they would like to build.
4. Show learners the pictures of the various shelters in the Teachers' Resource Pack. Feel free to add in more.

NOTEPAD

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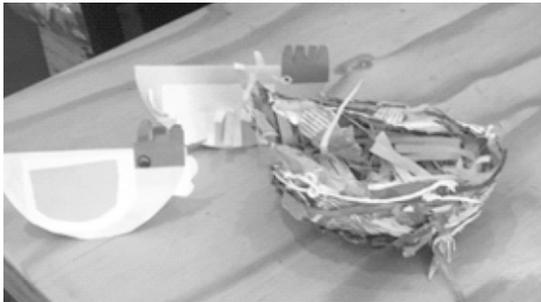
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5. Give learners time to look carefully at the different shelters and encourage them to look carefully and try to work out the:
   - Different materials used
   - The different shapes they could use
   - How many different parts there might be?
   - How the different parts are joined
   - The textures and possible colours

Teaching tip: Encourage the creative thinking competency
The pictures used are only for inspiration and not for copying. Learners need to think creatively and design their own pet shelters which may be completely different from any of the pictures.
Refer to page 3 for more on competencies.

STEP 6

Let's brainstorm

1. In their groups, learners brainstorm what they might need to build their chosen pet shelter based on their observations from Step 5.
2. Where possible, learners need to try and make a list of sorts – they could do little drawings and/or write simple words. They need to think of what materials and tools they will need to build their shelter.
3. While they are brainstorming, you can walk around and help with the lists.

STEP 7

Let's explore

1. Based on their lists, of learners gather their tools and materials.
2. They can use what is available in the classroom but are also encouraged to explore their environment more widely for found materials and objects.

NOTEPAD

Note your bright ideas here:

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Note your reflections here:

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STEP 8

Let's plan

1. Once learners have collected their tools and materials, they need to collaborate, discuss and plan how their pet shelters will be built.
2. This is an ideal time to facilitate the learning and use of sequencing and giving instructions. Ask questions such as, "What will you do first?" or "Where will you start?", "What will you do next?" and "Then what will you do?"
3. If appropriate, learners can make rough designs on scrap paper to show their planning. These plans will be presented to the class for comment and feedback in *Step 9 Let's Present*.

> *Teaching tip: The competencies*
> *The four problem-based learning steps should not be rushed as the process of planning and designing are as, if not more, important than the product.*
> *Through this process learners develop Character, Thinking and Connection which are all skills for a changing world.*
> *Refer to page 3 for more on competencies.*

THE JOURNEY: STAGE 3

DESIGN-BASED LEARNING

The design phase is where the design comes to life as a built object. Before building, learners create a design prototype. They present these to their peers for feedback and then iterate and change or improve on the original design.

STEP 9

Let's present

1. In this step, each group makes a first public presentation of their plans for their pet shelters.
2. Each group can present and explain their plans to the class. Learners in the class can ask questions and give positive and useful feedback.

Note your bright ideas here:

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Teacher tip: Peer review and feedback guide
Providing the learners with a reviewing and feedback guide helps focus their obervations, organise their thinking and make their feedback appropriate. Creating a guide like this together with even young learners is an excellent way to start developing their critical thinking.

PET SHELTER FEEDBACK GUIDE	☻	☺	☹
Does the plan make sense or is it confusing?			
Are they using only found and recycled materials?			
Has the group explained how the shelter will be built?			
Will the shelter hold together or fall apart?			

2. The groups need to discuss the feedback and decide if they need to make any changes to their plans to improve their pet shelters.
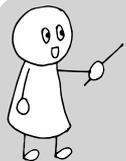
S.P.E.C.I.A.L.
*Getting feedback and making changes to improve on the original design based on this feedback is an example of **iteration**.*

STEP 10

Let's build

1. Learners have their materials, their tools and their iterated design plans and are now ready to go ahead and build their pet shelters. This is the most fun part when all the learners' hard work and planning is brought to life.

STEP 11

Let's celebrate and share

1. Today is the day that learners exhibit their pet shelters to the rest of the school and, if possible, parents and members of the community.
2. The exhibition can be opened with a celebratory song and/or dance.

Note your bright ideas here:

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The song and dance links well to Life Skills.

LIFE SKILLS
Performing Arts
Choosing and making own movement sentences to interpret a theme with a beginning and an ending.
Clapping rhythms in three or four time.
Moving to music in three or four time.

3. During the exhibition, the learners must be prepared to answer questions from the 'public' and explain how they made their pet shelters.

"Welcome to our exhibition!"

NOTEPAD

Note your bright ideas here:

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STEP 12

Let's look back and learn

"We don't learn from experience, we learn from reflecting on experience." (John Dewey)

In this final step, each learner needs to think back on their experience of the project and answer these reflection questions.

- **Pets**
  - Share three new facts you learnt about pets.
  - What is the most interesting new thing that you learnt about a pet?
  - Explain three ways to care for a pet.
- **Building the pet shelter**
  - What did you love the most about the project?
  - What did you find the most difficult about the project?
  - What was the biggest problem you had to overcome when building the pet shelter and how do you solve it?
  - What advice would you give to other learners who might do this project?
- **Working in a group**
  - What was the best part of working in your group?
  - What do you think was the most important thing you did for your group?
  - What was difficult about working in a group?
  - What was the biggest problem you had to overcome when working in a group and could you solve it?
- **Yourself**
  - What did you do in the project that makes you feel proud of yourself?

> **Teaching tip: You're never too young to learn**
> *Some of these reflection questions might be challenging for grade 1s – although they will probably amaze you with their insights.*
> *It's probably best to start by selecting a few questions and putting them to the group.*
> *Scaffold their thinking by giving examples and relating the questions to your observations of the project process (E.g. Remember when Tshidi wouldn't share the scissors and it was a problem? What did you do to solve that problem?)*

NOTEPAD

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