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PLANNER & TRACKER FOR RECOVERY ANNUAL TEACHING PLAN (ATP)

2021 - 2023

NATURAL SCIENCES & TECHNOLOGY

GRADE 4 TERM 2

Helping teachers and learners to catch up with learning losses, master new content and acquire skills for the future.

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Read to Lead
A Reading Nation is a Leading Nation

2030 NDP

- Please note that a Natural Sciences & Technology structured learning programme that includes daily lesson plans and classroom resources is available for download from www.nect.org.za
- This is a zero-rated website, so there are no data costs for downloads.
- This document can be used independently of the structured learning programme.

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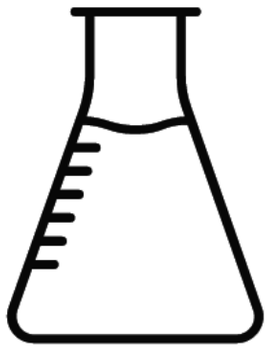
Planner & Tracker for Recovery ATP

Natural Sciences & Technology



Grade 4 Term 2

2021 - 2023

Table of Contents

Introduction

Dear Natural Sciences & Technology Teachers,

The COVID-19 Pandemic has left us with an enormous challenge in education. As we return to 'normal schooling', we all have to work smarter and harder to ensure that our system recovers.

This document is designed to help you achieve this. By systematically working through this plan, we are confident that you can address the loss of teaching and learning time, and bring your learners to the level where they need to be in terms of NS & Tech.

We thank you in advance for the commitment, dedication and hard work that is required of you.

You are truly building our nation.

With very best wishes for the term ahead,

The DBE / NECT Recovery ATP Trackers Team

Overview

Please continue to keep the following key principles in mind throughout the recovery journey:

- The development of **Science Process Skills** is key to the teaching and learning of the subject. Focussing on these skills is critical.

- Learners should be given as many opportunities as possible to **write regularly and read for meaning** in Natural Science and Technology, in order to develop **language skills** as well. Due to learning losses, as a result of the Covid pandemic, it is the responsibility of every educator to develop these literacy skills.

- It is very important to give learners a sense of **how science applies to their daily lives**, and of **the value that science adds to their lives**. Hold a brief discussion on this point when introducing a new topic, and invite learners to contribute their ideas on the uses and value that this topic has.

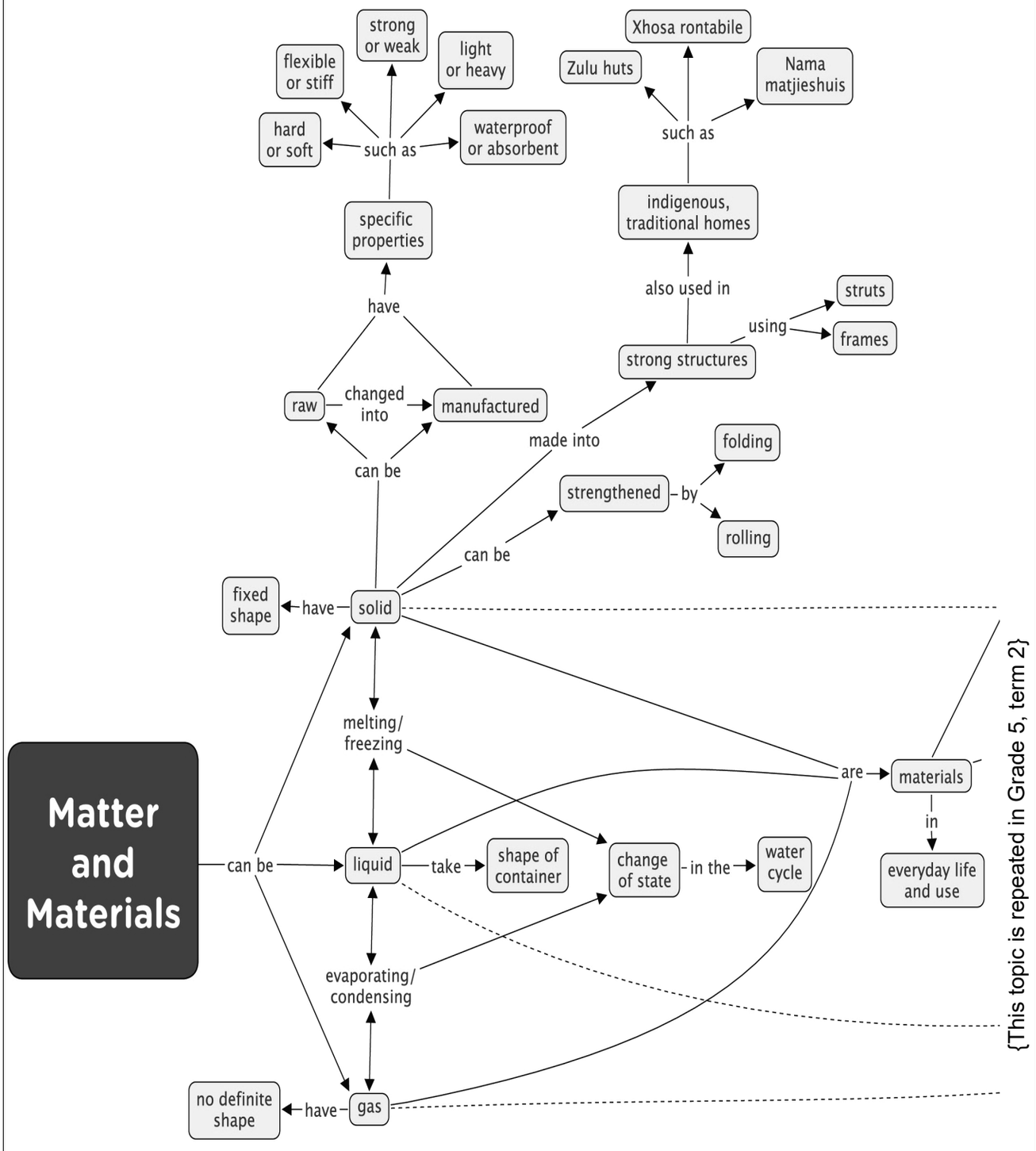
- At the end of every topic, come back to the topic overview, and **reflect on what has been learnt and taught**. In particular, it is important to note your challenges and ideas for future improvement, so that you can improve your teaching the next year.

- At the core of all scientific activities is the need to **ask questions**. These questions help us seek answers through observation and experimental design. The results of these questions should raise more questions. It is this natural curiosity that all teachers, and especially science teachers, should be encouraging in their classrooms. **Encourage curiosity** and **questions that investigate, inquire and probe.**

- **Build a solid conceptual foundation** for learners. A **conceptual chain** for the phase is provided at the start of this document. It is important for all NS & Tech teachers to work cohesively, to ensure that learners are equipped with a solid understanding of the required concepts, by the time they leave the phase.

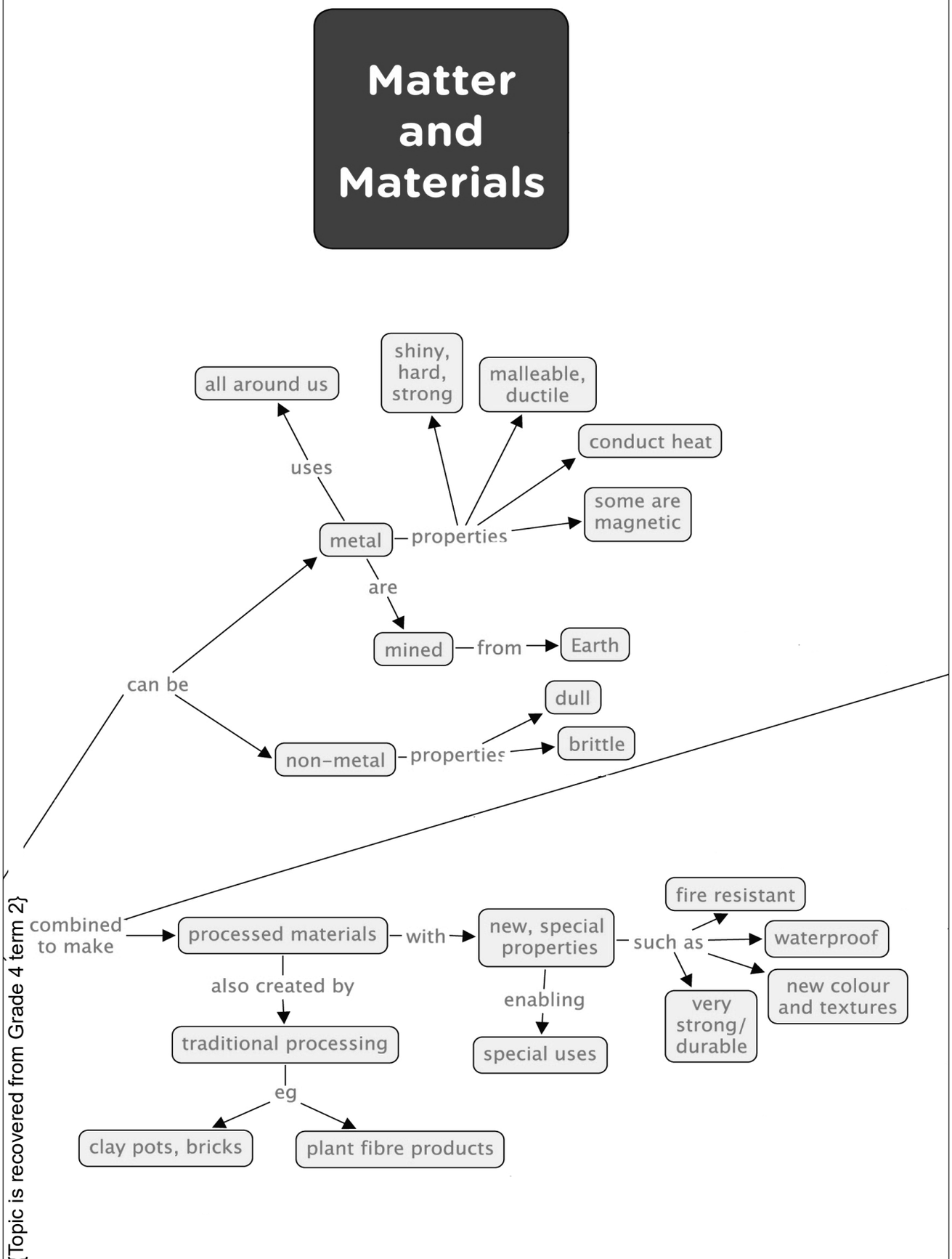
- Using the **CONCEPTUAL CHAIN** provided, **work together** as a department to:
  a. Check that all **concepts for the phase are covered** in your school's recovery plan.
  b. **Check for overlaps** across the grades.
  c. **Identify the weak links in the conceptual chain** - points where learners struggle and may be the source of misconceptions or common errors.
  d. Decide how to **emphasise critical concepts from previous grades,** especially where topics have moved from a different grade in the revised ATP.

Gr 4



*The concept maps in this section have been adapted from **Thunderbolt Kids resources** published by **Siyavula.***

Gr 5



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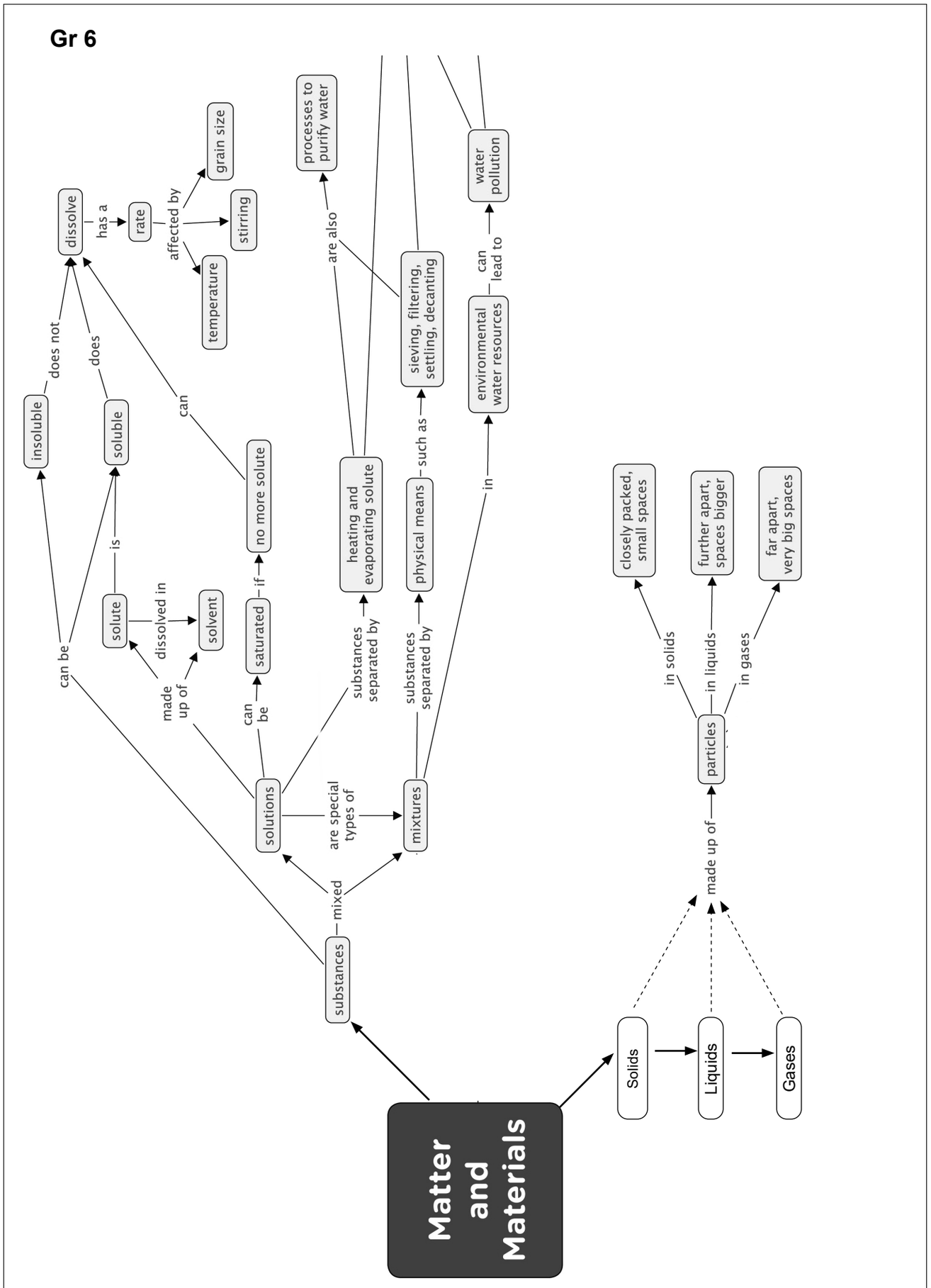


*The concept maps in this section have been adapted from **Thunderbolt Kids resources** published by **Siyavula.***

Amendments to the Annual Teaching Plan

The Recovery ATP for Natural Sciences & Technology has the **same content as in CAPS**.

It is important to note that all the topics for Grade 4 Term 2, NS and Tech have been **brought back as per CAPS (Grade 4)**. Therefore, there is no change to the topics and time allocation.

- **All topics remain the same**:
  1. Materials around us (3,5 weeks)
  2. Solid materials (2 weeks)
  3. Strengthening materials (2 weeks)
  4. Strong frame structures (2,5 weeks)

Directions on how to cover all required topics are provided in the Tracker that follows.

Amendments To The Programme Of Assessment

- The Programme of Assessment is aligned to the Revised Section 4 of CAPS.
- Both formal and informal assessment should continue as normal.
- Recording of the informal assessment is left to the discretion of the teacher.
- The 2022 formal assessment tasks for Grade 4 are as follows:

	TERM 1	TERM 2	TERM 3	TERM 4
Practical Task/Investigation	20 marks	20 marks	20 marks	-
Test	20 marks	40 marks	20 marks	40 marks

Sample Assessment Tasks and Memoranda / Rubrics for Grade 4 Term 2 are included in this document.

Amendments to the Annual Teaching Plan

Notes:

- **Column 1** shows the **time allocation** per topic.
- **Column 2** shows the **Recovery ATP requirements** for Grade 4 Term 2.
- **Column 3** explains any **changes** that have been made to the teaching plan.
- **Column 4** shows **where in the NECT lesson plans** this is covered.
- **Column 5** shows **where in the approved textbooks** this is covered.
- Finally, if, for any reason, the **Term 2 teaching time** for NS & Tech **is reduced,** please ensure that the **KEY CONCEPTS** listed below each table are thoroughly covered.

Key To Approved Textbook Abbreviations:	
SFA	Solutions for All Natural Sciences and Technology Grade 4 MacMillan
S&M	Study & Master Natural Science and Technology Gr4. Cambridge University Press
DbD	Day by Day Natural Sciences and Technology Grade 4 Maskew Miller Longman
PLAT	Platinum Natural Sciences and Technology Grade 4 Maskew Miller Longman
VIVA	Viva Natural Sciences and Technology Grade 4 Vivlia
SO	Spot On Natural Sciences and Technology Grade 4 Pearson
OS	Oxford Successful Natural Sciences and Technology Grade 4 Oxford University Press
TC	Top Class Natural Sciences and Technology Grade 4 Shuter and Shooter
SIBB	Sasol Inzalo Bk B Natural Sciences and Technology Grade 4 Sasol

TIME ALLOCATION	DBE RECOVERY ATP REQUIREMENTS	NECT LESSON PLANS: LESSONS	APPROVED TEXTBOOKS		DATE COMPLETED
Weeks 1 – 4 (3,5 weeks)	Materials around us 1. Solids, liquids and gases 2. Change of state 3. The water cycle	<u>Grade 4 Term 2 Lesson Plans</u> Lesson 1A: Solids, Liquids and Gases Lesson 1B: Solids Lesson 1C: Liquids Lesson 2A: Gases Lesson 2B: Changing the state of materials Lesson 2C: Heating materials Lesson 3A: Cooling materials Lesson 3B: The water cycle	SFA Gr4	73 - 86	
			S&M Gr4	54 - 63	
			DbD Gr4	51 - 60	
			PLAT Gr4	56 - 67	
			VIVA Gr4	50 - 62	
			SO Gr4	32 - 37	
			OS Gr4	46 - 53	
			SIBB Gr4	114 - 143	
			TC Gr4	41 - 49	

Scaling down

If the Term 2 teaching time is reduced, ensure that learners have a thorough understanding of the following key content and concepts:

<u>Materials around us</u>

- The 3 states of matter - solids, liquids and gases make up all the materials around us. All matter is made up of molecules. Identify different matter.
- The distance between molecules identifies what state the material is in. Solids – molecules are very close together. Liquids – molecules have more room to move. Gases – molecules have lots of space to move around: they can be contained in a closed container.
- Properties: solids keep their shape, liquids flow and take the shape of their container, gases like air, have no shape and can spread out.
- Heating and cooling causes solids, liquids and gases to change state. Give examples of everyday items changing their state. E.g. water
- Water is a vital resource and is valuable for life on Earth. It is needed for drinking, cleaning, cooking and growing food.
- Describe the water cycle: Water evaporates, condenses, freezes and melts in the cycle.
- The need to take care of water and not waste it.

TIME ALLOCATION	DBE RECOVERY ATP REQUIREMENTS	NECT LESSON PLANS: LESSONS	APPROVED TEXTBOOKS		DATE COMPLETED
Weeks 4 - 6 (2 weeks)	Solid materials 1. Raw and manufactured materials 2. Properties of materials	Grade 4 Term 2 Lesson Plans Lesson 3C: Raw and manufactured materials Lesson 4A: Sand and clay Lesson 4B: Coal and oil Lesson 4C: Paper making Lesson 5A: Animal wool and hide Lesson 5B: Properties of materials	SFA Gr4	91 - 101	
			S&M Gr4	65 - 74	
			DbD Gr4	63 – 71	
			PLAT Gr4	70 - 79	
			VIVA Gr4	65 - 76	
			SO Gr4	38 - 43	
			OS Gr4	54 - 57	
			SIBB Gr4	148 - 172	
			TC Gr4	50 - 59	

If the term 2 teaching time is reduced, ensure that learners have a thorough understanding of the following key concepts:

Solid Materials

- Raw materials come from nature and are in their natural state e.g. wool from sheep
- When raw materials are used to create other useful materials, they become manufactured materials e.g. wool from sheep is made into jerseys and socks. Manufactured means made by man / humans.
- Examples of some raw materials used to make other useful materials. E.g. sand used to make glass, clay used to make ceramics, coal and oil used to make plastics, paints and fabrics, wood and fibre from plants are used to make paper, animal wool and hide are used to make fabrics and leather
- Identify raw and manufactured materials.
- Identify raw materials needed to make glass – sand, limestone and ash. And ceramic and pottery products – clay. Heating the raw materials turns them into manufactured products.
- Importance of coal and oil – all the various products we get from them – plastics, paints, fabric for clothes, electricity, petrol, gas
- Wood and plant fibres – used to make paper. Know the paper making process.
- Animal hides and wool/fleece – used to make leather and fabric or balls of wool.
- Properties of raw and manufactured materials. E.g. being hard or soft, stiff or flexible, strong or weak, light or heavy, waterproof or absorbent. Different properties make them suitable for different tasks. E.g. plastic is waterproof.

TIME ALLOCATION	DBE RECOVERY ATP REQUIREMENTS	NECT LESSON PLANS: LESSONS	APPROVED TEXTBOOKS		DATE COMPLETED
Weeks 6 - 8 2 weeks	Strengthening materials 1. Ways to strengthen materials	Grade 4 Term 2 Lesson Plans Lesson 5C: Strengthening materials Lesson 6A: Hollow paper pillars Lesson 6B: Making struts	SFA Gr 4	105 - 110	
			S&M Gr 4	76 - 79	
			DbD Gr 4	73 - 80	
			PLAT Gr 4	82 - 91	
			VIVA Gr 4	78 - 84	
			SO Gr 4	44 - 45	
			OS Gr 4	58 - 61	
			SIBB Gr 4	182 - 188	
			S&S Gr 4	60 - 66	

If the Term 2 teaching time is reduced, ensure that learners have a thorough understanding of the following key concepts:

Strengthening Materials

- A structure is made up of several parts. Structures need to be strong and stable to support objects
- Structures can be strengthened by choosing strong materials, by changing the shape or arrangement of the material, adding layers of material. E.g. paper can be folded or rolled into different shaped tubes (pillars) to support objects.
- Struts are used to support a structure by pushing against the structure to keep it in place.

TIME ALLOCATION	DBE RECOVERY ATP REQUIREMENTS	NECT LESSON PLANS: LESSONS	APPROVED TEXTBOOKS		DATE COMPLETED
Weeks 8 - 10 2.5 weeks	Strong frame structures 1. Struts and frame structures 2. Indigenous structures	Grade 4 Term 2 Lesson Plans Lesson 6C: Strut and frame structures Lesson 7A: Joining struts Lesson 7B: Indigenous structures Lesson 7C: Investigating water towers Lesson 8A: Designing a water tower Lesson 8B: Making a water tower Lesson 8C: Evaluating a water tower	SFA Gr 4	112 - 130	
			S&M Gr 4	80 – 89	
			DbD Gr 4	83 – 88	
			PLAT Gr 4	94 – 105	
			VIVA Gr 4	87 – 48	
			SO Gr 4	26 – 29 46 - 49	
			OS Gr 4	62 – 68	
			SIBB Gr 4	192 – 210	
			TC Gr 4	67 - 75	

If the Term 2 teaching time is reduced, ensure that learners have a thorough understanding of the following key concepts:

Strong Frame Structures

- Structures must be strong, rigid and stable. We use strong material like steel or wood to build strong structures.
- Frame structures are made of different parts or struts joined into shapes making a strong, stable structure. E.g. roof trusses, bridges, cranes, pylons, skeletons (bones). Triangular structures are the strongest.
- Indigenous, traditional homes such as Zulu, Xhosa and Nama hits make use of a framework of struts – such as branches/sticks, clay bricks, wooden poles.
- Water towers are elevated structures supporting water tanks at a height that can pressurise a water supply system.
- Designing, making and evaluating a water tower

Below is a sample assessment test and memorandum. Please feel free to use this task as is, or to adapt for your context. It is important to ensure that learners are only assessed on work that has been taught.

PRACTICAL TASK / INVESTIGATION: 20 MARKS

GRADE 4
Natural Sciences & Technology
Term 2
Practical Task
20 marks

Time allocation: 40 minutes (20 minutes preparation, 20 minutes task time)

NOTE TO THE TEACHER

1. This practical activity will be completed as part of Section E of lesson 1C.
2. This practical will take place during the lesson after the teaching component in Section D, “Accessing Information”.
3. The first 20 minutes will be used to teach section D and prepare learners for the practical task.
4. The next 40 minutes will be used to complete the practical activity as outlined in Section E.
5. The instructions and content of the practical task should be written on the chalkboard for the learners.
6. The memorandum for assessing the practical task is provided.
7. This practical will be done in groups of 6.
8. Each group will need the following equipment and materials to complete the practical task:
    - a container of water
    - a few teaspoons of cooking oil
    - 2 cups or tins or jars
    - a flat plate or large lid or polystyrene tray
    - a spoon/stick to stir
    - a piece of newspaper

   Ensure that you have these materials prepared for each group before the lesson starts.
9. The learners should complete the drawings with a sharp pencil if possible and the written answers should be completed in pen.
10. Tell the learners that they are going to be doing an investigation where they will be exploring the properties of liquids.
11. They will be looking at two liquids in this investigation, water and oil.
12. Divide the learners into groups of six.
13. Write the following onto the chalkboard (always try to do this before the lesson starts):

PRACTICAL TASK

1. This practical task will be done in groups of 6.
2. Each group will be doing tasks to explore the properties of water.
3. Each person in the group must participate in the investigation and complete the answers to the written activities in their workbooks.
4. Each group will need the following materials and equipment to do the investigation:
   - a container of water
   - a few teaspoons of oil
   - two glasses/cups/tins/jars
   - a flat plate/polystyrene tray
   - a spoon/stick to stir
   - a sheet of newspaper
5. Read through the practical task with the learners.
6. Remind the learners that in previous lessons they have investigated the properties of solids.
7. Tell the learners that today they are going to be investigating the properties of liquids and recording their findings for assessment.
8. Have each group collect the equipment they will need for the task.
9. Write the following onto the chalkboard (always try to do this before the lesson starts):

Task 1: Investigating water **[7 marks]**

Pour a small amount of water into one of the cups/tins/jars.

1a. Does the water have a colour?

1b. Smell the water. What does the water smell like?

1c. Can you put your finger through the surface of the water?

1d. How does your finger feel after touching the water?

1e. Can you pour the water easily from one cup to another?

1f. Does the amount stay the same once you have poured it into the other cup?

1g. Pour the water from the cup onto the plate. What do you notice the water does?

Now take a strip of newspaper and dip it in the water. Place this strip in a sunny place. We will come back to this at the end of the lesson.

10. Read through task 1 with the learners.
11. Ask them if they have any questions.
12. Tell the learners they have 10 minutes to complete Task 1.
13. Supervise the learners whilst they complete the task and answer any questions they may have.
14. After 10 minutes call the learners back to attention.

16. Tell the learners that they are now going to be doing the same investigation with the oil.
17. Tell the learners to pour the water from the plate into the garden before starting Task 2.
18. They should try and dry the plate with a bit of the newspaper before starting Task 2.
19. The following will need to be written on the chalkboard (always try to do this before the lesson starts):

Task 2: Investigating oil **[7 marks]**

Pour the oil into one of the cups/tins/jars.(It must be empty)

2a. Does the oil have a colour?

2b. Smell the oil. What does the oil smell like?

2c. Can you put your finger through the surface of the oil?

2d. How does your finger feel after touching the oil?

2e. Can you pour the oil easily from one cup to another?

2f. Does the amount stay the same once you have poured it into the other cup?

2g. Pour the oil from the cup onto the plate. What do you notice the oil does?

Now take a strip of newspaper and dip it in the oil. Place this strip in a sunny place. We will come back to this at the end of the lesson.

20. Read through task 2 with the learners.
21. Ask them if they have any questions.
22. Tell the learners they have 10 minutes to complete task 1.
23. Supervise the learners whilst they complete the task and answer any questions they may have.
24. After 10 minutes call the learners back to attention.
25. Tell the learners that they are now going to complete a third task.
26. The following will need to be written on the chalkboard:

Task 3: Comparing oil and water **[6 marks]**

Pour the oil into the cup and half fill the cup with water. Give this mixture a stir.

3a. What do you notice about the mixture of oil and water?

3b. After 1 minute, what do you notice has happened to the mixture now?

Collect your strips of paper from task 1 and 2 from their sunny spot.

3c. Which strip of paper is drier; the oil dipped paper or the water dipped paper?

3d. What do we call this process of “drying”?

3e. Name1 property that you observed where oil and water are the same.

3f. Name 1 property that you observed where oil and water differ.

Grade 4
Natural Sciences & Technology
Term 2
Practical Task - Memorandum

Topic	Activity	Expected answer/outcome	Marks
	1		
Materials around us	1a.	It has no colour	1
Materials around us	1b.	It has no smell	1
Materials around us	1c.	Yes	1
Materials around us	1d.	Feels wet	1
Materials around us	1e.	The water can easily be poured.	1
Materials around us	1f.	A very little of the water is left behind. Almost all of it has poured from one cup to the other.	1
Materials around us	1g.	It flows and spreads to take the shape of the plate	1
	2		
Materials around us	2a.	It is yellow	1
Materials around us	2b.	It has a smell. (Description may vary)	1
Materials around us	2c.	Yes	1
Materials around us	2d.	Feels slippery/sticky	1
Materials around us	2e.	The oil can easily be poured.	1
Materials around us	2f.	Some of the oil has coated the sides of the cup.	1
Materials around us	2g.	It flows and spreads to take the shape of the plate	1
	3		
Materials around us	3a.	The oil and water do not mix together.	1
Materials around us	3b.	The oil floats to the top.	1
Materials around us	3c.	The strip dripped in water.	1
Materials around us	3d.	Evaporation	1
Materials around us	3e.	(Choose one) They can be poured They flow to take up space You can put your finger into them	1
Materials around us	3f.	(Choose one) Colour Smell Water evaporates faster Water feels wet and not slippery, oil feels wet and slippery	1
			TOTAL: 20

Grade 4 Natural Sciences & Technology Term 2 Assessment

Below is a sample assessment test and memorandum. Please feel free to use this task as is, or to adapt for your context. It is important to ensure that learners are only assessed on work that has been taught.

GRADE 4
Natural Sciences & Technology
Term 2
Test
40 marks
60 minutes

NOTE TO THE TEACHER:

If possible, photocopy this test for each learner. If this is not possible, write the test on the chalkboard.

INSTRUCTIONS TO THE LEARNERS

1. Answer all questions in blue or black ink.
2. Read each question carefully before answering it.
3. Pay attention to the mark allocations.
4. Plan your time carefully.
5. Write your answers in the spaces provided.
6. Write neatly.

PRACTICE QUESTION

Read the question and circle the letter that shows the correct answer.

1. Which of the following is not a living organism?
    a. bird
    b. stone
    c. ant
    d. dog

You have answered correctly if you have circled (b)

Grade 4 Natural Sciences & Technology Term 2 Assessment

PART 1: Life and Living

QUESTION 1: MULTIPLE CHOICE **[4]**

Read each question and circle the letter that shows the correct answer.

1a. Which one of these is NOT a life process?

A. Thinking

B. Breathing

C. Reproducing

D. Growing

1b. Which of these statements is TRUE?

A. Plants release carbon dioxide as a waste substance

B. Sweating is a way of getting rid of waste substances

C. Animals release oxygen as a waste substance

D. Plants and animals do not need to release waste

1c. Which of these statements is FALSE?

A. The flower of a plant produces seeds

B. The stem supports the plant and holds the leaves

C. The seeds of a fruit can be on the inside or the outside

D. The roots are only needed to hold the plant in the soil

1d. Which one of these groups describes conditions needed for growth in plants?

A. Heat, water, oxygen, soil

B. Water, sunlight, oxygen, animals

C. Sunlight, soil, water, air

D. Heat, wind, water, soil

QUESTION 2: Match the columns [4]

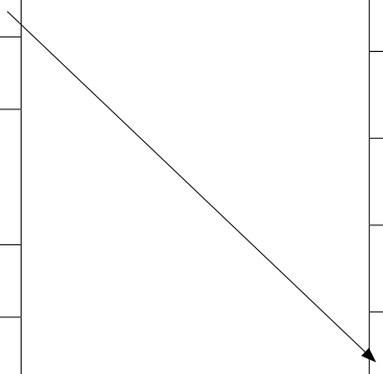
Instructions:

Match the sentences in COLUMN A with the words in COLUMN B.

Draw a line to join the sentence in COLUMN A with the correct word in COLUMN B.

Do this as shown in the example below.

COLUMN A	
example	Non-living
2a.	Seed
2b.	Any substance that nourishes or feeds a living thing
2c.	Grassland
2d.	An animal that is suited to its habitat



COLUMN B
A. Nutrients
B. Habitat
C. Adapted
D. Dormant
E. Rock

QUESTION 3 [2]

Complete the following sentences using words in the block below:

fruits, anchored, stems, water, nutrients

Rewrite the sentences and underline your answers.

3a. The roots of a plant grow under the ground and keep the plant _____.

3b. Roots absorb _____ and water from the soil for the plant.

3c. All plants have leaves, roots and _____.

3d. Some plants also have flowers and _____.

QUESTION 4: **[3]**

Write the word that is being described in the sentence.

Only write the answer.

4a. The place where an animal or plant lives.

_____

4b. An animal that hunts and eats other animals.

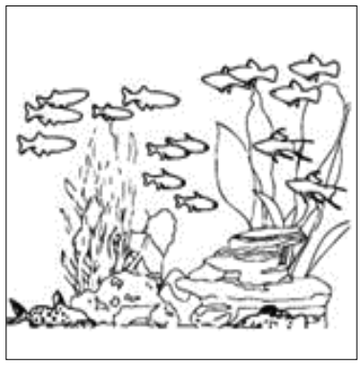
_____

4c. All the plants and animal life in a place.

_____

QUESTION 5 **[4]**

The diagram below shows an ocean habitat.



(Note to teacher: Copy this picture or use Term 1, Resource 18)

oceans, seas, salt water, 75 % Earth's surface, fish, turtles, predators, beaches, shores, seagulls, rocks

Using this diagram and the words above to write 4 sentences to explain what you know about ocean habitats.

_____

_____

_____

_____

_____

_____

_____

PART 2: Matter and Materials

QUESTION 6: MULTIPLE CHOICE **[4]**

Read each question and circle the letter that shows the correct answer.

6a. Which one of these is NOT one of the three states of matter?

A. Solid

B. Liquid

C. Gas

D. Molecule

6b. Which of these statements is TRUE?

A. All matter is made up of molecules

B. Only the molecules in liquids move

C. Molecules don't move. They are still and solid

D. Molecules are always the same distance apart from each other

6c. Which of these statements is FALSE?

A. Oxygen is a gas

B. Gases can be stored in an open container

C. Gases can be compressed

D. Carbon dioxide is a gas

6d. Which one of these correctly describes the melting of ice?

A. Liquid → solid

B. Liquid → solid

C. Solid → gas

D. Solid → liquid

QUESTION 7: Match the columns [4]

Instructions:

Match the sentences in COLUMN A with the words in COLUMN B.

Draw a line to join the sentence in COLUMN A with the correct word in COLUMN B.

Do this as shown in the example below.

COLUMN A	
example	Solid form of water
2a.	A solid is changed to a liquid when heat is added
2b.	Formed when water vapour condenses high up in the air
2c.	Water in gas form
2d.	Process of water vapour cooling to a liquid

COLUMN B
A. Water vapour
B. Meltingt
C. Rain
D. Condensation
E. Ice

QUESTION 8 [5]

Complete the following sentences using words in the block below:

manufactured, raw, processed, plastics, naturally

Rewrite the sentences and underline your answers.

8a. Wood, wool and sand are examples of _____ materials.

8b. Glass, shoes and petrol are examples of _____ materials.

8c. Raw materials occur _____ and need to be _____ before they can be used.

8d. _____ are flexible and can be moulded into different shapes.

QUESTION 9: **[4]**

Write the word that is being described in the sentence.

Only write the answer.

9a. A mixture of sand, limestone and soda ash is used to manufacture this product.

_____

9b. A raw material that is mined from the Earth that is used to make electricity.

_____

9c. Animal hides are processed here to make leather.

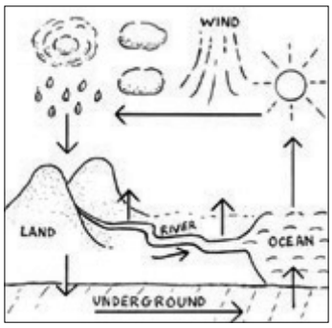
_____

9d. Raw material used to make paper.

_____

QUESTION 10: **[4]**

The diagram below shows the water cycle.



(Note to teacher: Copy this picture or use Term 2 Poster)

ocean, river, water, evaporation, water vapour, sun, clouds, condensation, rain, ground, flows, cycle

Using this diagram and the words above, write 4 sentences to explain the water cycle.

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TOTAL: 40

Grade 4
Natural Sciences & Technology
Term 2
Test
Memorandum
40 Marks

CAPS Topic	Questions	Expected answer(s)	Marks
PART A: Energy and Change & Systems and Control			
	1		
Living and non-living things	1a.	A ✓	1
What plants need to grow	1b.	B ✓	1
What plants need to grow	1c.	D ✓	1
What plants need to grow	1d.	C ✓	1
	2		
Living and non-living things	2a.	D ✓	1
Living and non-living things	2b.	A ✓	1
Habitats	2c.	B✓	1
Habitats	2d.	C ✓	1
	3		
What plants need to grow	3a.	anchored ✓	1
What plants need to grow	3b.	nutrients ✓	1
What plants need to grow	3c.	leaves ✓	1
What plants need to grow	3d.	fruits ✓	1

	4		
Habitats	4a.	habitat ✓	1
Habitats	4b.	predator ✓	1
Habitats	4c.	vegetation ✓	1
	5		
Habitats	5.	(Any 4) ✓ ✓ ✓ ✓ • Oceans and seas are salt water • They cover 75% of the Earth's surface • There are animals that live under the water, • like fish • There are animals that live under water and a bit on land, • like turtles • Turtles lay their eggs under the sand on the beach before going back to the ocean • Sharks are one of the predators of the sea • Lots of small creatures live in the shallow water around the rocks near the shore, • like crabs and mussels • Seagulls are birds that rely on the sea for food	4
PART 2: Matter and Materials			
	6		
Materials around us	6a.	D ✓	1
Materials around us	6b.	A ✓	1
Materials around us	6c.	B ✓	1
Materials around us	6d.	D ✓	1
	7		
Materials around us	7a.	B ✓	1
Materials around us	7b.	C ✓	1
Materials around us	7c.	A ✓	1
Materials around us	7d.	D ✓	1

	8		
Solid materials	8a.	raw ✓	1
Solid materials	8b.	manufactured ✓	1
Solid materials	8c.	naturally ✓ processed ✓	2
Solid materials	8d.	plastics ✓	1
	9		
Materials around us	9a.	glass ✓	1
Materials around us	9b.	coal ✓	1
Materials around us	9c.	tannery ✓	1
Materials around us	9d.	wood ✓	1
	10		
Materials around us	10.	(Any 4) ✓ ✓ ✓ ✓ • Water is in a liquid state in the sea or river or dam • The sun heats the water • Some of the water evaporates • and turns into water vapour • The water vapour condenses • to form clouds • Rain then falls to Earth • This water then flows back into the sea or rivers • It soaks into the ground into the under-ground water • The water cycle starts again	4
			TOTAL: 40