

# **NATURAL SCIENCES**

**GRADE 8 TERM 4**

**Tracker**



Week 1											
CAPS Concepts and Activities	CAPS Page no.	Year:					Year:				
		Class					Class				
		Date Completed					Date Completed				
<b>Week 1 Lesson A</b>											
<b>Topic: The Solar System</b> <b>Content &amp; Concepts: The Sun</b> <ul style="list-style-type: none"> <li>The Sun is like all other stars – it produces large amounts of heat and light continuously</li> <li>The energy in our Sun comes from powerful nuclear reactions during which hydrogen gas changes into helium gas</li> </ul>	53										
<b>Week 1 Lesson B</b>											
<b>Topic: The Solar System</b> <b>Content &amp; Concepts: Objects around the Sun</b> <ul style="list-style-type: none"> <li>A variety of objects orbit the Sun - eight planets and their moons, rocky asteroids, outer dwarf planets and many distant icy and dusty objects in the Kuiper Belt and Oort Cloud, at the edge of the Solar System</li> <li>Gravity is the force that keeps all these objects in their stable, predictable orbits around the Sun</li> </ul>	53										
<b>Week 1 Lesson C</b>											
<b>Topic: The Solar System</b> <b>Content &amp; Concepts: Objects around the Sun</b> <ul style="list-style-type: none"> <li>All the planets and other objects in the Solar System have their own special features including size, distance from the Sun, number of moons known, composition, surface temperature, time it takes for one orbit around the Sun</li> </ul>	53										
<b>Reflection</b>											
Year:											
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?					
						HOD:			Date:		

NECT LEARNING PROGRAMME: NATURAL SCIENCES  
GRADE 8 TERM 4 TRACKER

Year:	
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?
	HOD:

Week 2											
CAPS Concepts and Activities	CAPS Page no.	Year:					Year:				
		Class					Class				
		Date Completed					Date Completed				
<b>Week 2 Lesson A</b>											
<b>Topic: The Solar System</b> <b>Content &amp; Concepts: Objects around the Sun</b> <ul style="list-style-type: none"> <li>All the planets and other objects in the Solar System have their own special features including size, distance from the Sun, number of moons known, composition, surface temperature, time it takes for one orbit around the Sun</li> </ul>	53										
<b>Week 2 Lesson B</b>											
<b>Topic: The Solar System</b> <b>Content &amp; Concepts: Objects around the Sun</b> <ul style="list-style-type: none"> <li>The Solar System looks like a flat disc or plate. The Sun spins (rotates) at the centre and the planets and all other objects orbit around it in the same direction</li> </ul>	53										
<b>Week 2 Lesson C</b>											
<b>Topic: The Solar System</b> <b>Content &amp; Concepts: Objects around the Sun</b> <ul style="list-style-type: none"> <li>All the planets and other objects in the Solar System have their own special features including size, distance from the Sun, number of moons known, composition, surface temperature, time it takes for one orbit around the Sun</li> </ul>	53										
<b>Reflection</b>											
Year:											
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?					
						HOD:			Date:		

NECT LEARNING PROGRAMME: NATURAL SCIENCES  
GRADE 8 TERM 4 TRACKER

Year:	
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?
	HOD:

Week 3											
CAPS Concepts and Activities	CAPS Page no.	Year:				Year:					
		Class				Class					
		Date Completed				Date Completed					
<b>Week 3 Lesson A</b>											
<b>Topic: The Solar System</b> <b>Content &amp; Concepts: Objects around the Sun</b> <ul style="list-style-type: none"> <li>All the planets and other objects in the Solar System have their own special features including size, distance from the Sun, number of moons known, composition, surface temperature, time it takes for one orbit around the Sun</li> </ul>	53 54										
<b>Week 3 Lesson B</b>											
<b>Topic: The Solar System</b> <b>Content &amp; Concepts: Objects around the Sun</b> <ul style="list-style-type: none"> <li>Comets from the Oort Cloud come close to the Sun from time to time</li> </ul>	53										
<b>Week 3 Lesson C</b>											
<b>Topic: The Solar System</b> <b>Content &amp; Concepts: Earth's position in the Solar System</b> <ul style="list-style-type: none"> <li>The Earth is the third planet from the Sun</li> <li>The Earth is the only planet that is known to support life</li> <li>The conditions that support life on Earth include:               <ul style="list-style-type: none"> <li>temperature: Earth's distance from the Sun provides the ideal temperature range</li> <li>water is a liquid, gas or solid in Earth's temperature range</li> <li>sunlight provides the energy in the food chain</li> <li>oxygen: early life forms and algae produced enough oxygen for the evolution of more sophisticated life forms</li> </ul> </li> </ul>	53										

Reflection		
Year:		
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?	
	<table border="1" style="width: 100%;"> <tr> <td style="width: 70%;">HOD:</td> <td style="width: 30%;">Date:</td> </tr> </table>	HOD:
HOD:	Date:	
Year:		
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?	
	<table border="1" style="width: 100%;"> <tr> <td style="width: 70%;">HOD:</td> <td style="width: 30%;">Date:</td> </tr> </table>	HOD:
HOD:	Date:	





Reflection	
Year:	
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?
	HOD: <span style="float: right;">Date:</span>
Year:	
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?
	HOD: <span style="float: right;">Date:</span>



Week 5 Lesson C										
<p><b>Topic: Beyond the Solar System</b>  <b>Content &amp; Concepts: Light years, light hours and light minutes</b></p> <ul style="list-style-type: none"> <li>• People use light years to measure distances to stars and other objects beyond the Solar System</li> <li>• A light year is the distance that light travels in one year</li> <li>• One light year is equal to about 10 trillion kilometres (km)</li> <li>• <i>Alpha Centauri</i> is 42 trillion km away</li> <li>• A light hour is the distance that light travels in one hour</li> <li>• Our Solar System has a diameter of about 13 light hours</li> <li>• A light minute is the distance that light travels in one minute</li> <li>• The Earth is about 8 light minutes away from the Sun</li> </ul>	54									
Reflection										
Year:										
<p>Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>				
						HOD:		Date:		
Year:										
<p>Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>				
						HOD:		Date:		

Week 6											
CAPS Concepts and Activities	CAPS Page no.	Year:					Year:				
		Class					Class				
		Date Completed					Date Completed				
<b>Week 6 Lesson A</b>											
<b>Topic: Beyond the Solar System</b> <b>Content &amp; Concepts: Beyond the Milky Way Galaxy</b> <ul style="list-style-type: none"> <li>Our Milky Way Galaxy is only one of billions of galaxies scattered across the Universe</li> </ul>	54										
<b>Week 6 Lesson B</b>											
<b>Topic: Beyond the Solar System</b> <b>Content &amp; Concepts: Beyond the Milky Way Galaxy</b> <ul style="list-style-type: none"> <li>The size of the observable Universe is estimated to be about 28 billion light years</li> <li>Galaxies have various shapes and sizes</li> </ul>	54										
<b>Week 6 Lesson C</b>											
<b>Topic: Beyond the Solar System</b> <b>Content &amp; Concepts: Beyond the Milky Way Galaxy</b> <ul style="list-style-type: none"> <li>Our Milky Way Galaxy is only one of billions of galaxies scattered across the Universe</li> <li>The size of the observable Universe is estimated to be about 28 billion light years</li> <li>Galaxies have various shapes and sizes</li> </ul>	54										
<b>Reflection</b>											
Year:											
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?					
						HOD:			Date:		

NECT LEARNING PROGRAMME: NATURAL SCIENCES  
GRADE 8 TERM 4 TRACKER

Year:	
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?
	HOD: <span style="float: right;">Date:</span>

Week 7											
CAPS Concepts and Activities	CAPS Page no.	Year:					Year:				
		Class					Class				
		Date Completed					Date Completed				
<b>Week 7 Lesson A</b>											
<b>Topic: Looking into space</b> <b>Content &amp; Concepts: Early viewing of space</b> <ul style="list-style-type: none"> <li>• People can see planets and stars in the night sky</li> <li>• Stars can be arranged into visible constellations</li> <li>• Different cultures have identified and named certain constellations</li> <li>• Some constellations have stories linked to them</li> </ul>	54										
<b>Week 7 Lesson B</b>											
<b>Topic: Looking into space</b> <b>Content &amp; Concepts: Telescopes</b> <ul style="list-style-type: none"> <li>• People can see more details in the sky when they use a telescope</li> <li>• A telescope forms an image of the object and magnifies it (makes it look bigger)</li> </ul>	55										
<b>Week 7 Lesson C</b>											
<b>Topic: Looking into space</b> <b>Content &amp; Concepts: Telescopes</b> <ul style="list-style-type: none"> <li>• There are different types of telescopes including:               <ul style="list-style-type: none"> <li>○ optical telescopes receive light and focus it by refraction (using lenses) or reflection (using mirrors) such as SALT (Southern Africa Large Telescope), and the Hubble Space telescope</li> </ul> </li> </ul>	55										
<b>Reflection</b>											
Year:											
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?					
						HOD:			Date:		

NECT LEARNING PROGRAMME: NATURAL SCIENCES  
GRADE 8 TERM 4 TRACKER

Year:	
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?
	HOD:

Week 8											
		Year:					Year:				
		Class					Class				
		Date Completed					Date Completed				
<b>Week 8 Lesson A</b>											
<b>Topic: Looking into space</b> <b>Content &amp; Concepts: Telescopes</b> <ul style="list-style-type: none"> <li>There are different types of telescopes including:               <ul style="list-style-type: none"> <li>radio telescopes receive radio waves and focus them by reflection (typically using a metal receiving dish) such as the SKA (Square Kilometre Array)</li> </ul> </li> </ul>	55										
<b>Week 8 Lesson B</b>											
<b>Topic: Looking into space</b> <b>Content &amp; Concepts: Telescopes</b> <ul style="list-style-type: none"> <li>There are different types of telescopes including:               <ul style="list-style-type: none"> <li>optical telescopes receive light and focus it by refraction (using lenses) or reflection (using mirrors) such as SALT (Southern Africa Large Telescope), and the Hubble Space telescope</li> </ul> </li> </ul>	55										
<b>Week 8 Lesson C</b>											
<b>Topic: Looking into space</b> <b>Content &amp; Concepts: Telescopes</b> <ul style="list-style-type: none"> <li>Good conditions for looking into space include cloudless skies with limited light and air pollution</li> <li>South Africa has many locations that meet these requirements</li> </ul>	54 55										
<b>Reflection</b>											
Year:											
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?					
						HOD:			Date:		



NECT LEARNING PROGRAMME: NATURAL SCIENCES  
GRADE 8 TERM 4 TRACKER

Year:	
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?
	HOD:

Week 9												
CAPS Concepts and Activities	CAPS Page no.	Year:					Year:					
		Class					Class					
		Date Completed					Date Completed					
<b>Week 9 Lesson A</b>												
<b>Topic: Revision and Study</b>	47-55											
<b>Week 9 Lesson B</b>												
<b>Topic: Revision and Study</b>	47-55											
<b>Week 9 Lesson C</b>												
<b>Topic: Revision and Study</b>	47-55											
Reflection												
Year:												
<p>Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?</p>							<p>What will you change next time? Why?</p>					
							HOD:		Date:			
Year:												
<p>Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?</p>							<p>What will you change next time? Why?</p>					
							HOD:		Date:			

Week 10											
<b>CAPS Concepts and Activities</b>	CAPS Page no.	Year:					Year:				
		Class					Class				
		Date Completed					Date Completed				
<b>Examination</b>	91										
Reflection											
Year:											
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?					
						HOD:			Date:		
						Year:					
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?					
						HOD:			Date:		