Grade 7 Pre-Technical Studies

Term 1 - 40 complete lesson plans

Ready to teach, in the KICD lesson-plan format | 40-minute lessons | PDF and editable Word

ABOUT THIS PACK

40 complete, ready-to-teach Grade 7 Pre-Technical Studies lesson plans for Term 1, covering introduction to Pre-Technical Studies, safety in the immediate environment, computer concepts, introduction to drawing, free-hand sketching and ICT tools in communication.

TOPICS IN THIS PACK

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1.3	Computer Concepts	6
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2.2	Free-hand Sketching	10
2.3	ICT Tools in Communication	8

INSIDE EVERY LESSON PLAN

- The specific learning outcomes, key inquiry question, core competencies, values and PCIs, and the resources needed.
- A timed lesson flow: what the teacher does and what the learners do, from introduction to summary.
- The key content (a worked example, notes or a practical with its expected results), then four practice questions with the answers for the teacher.
- The common mistake to watch for, and ideas for learners who need support and for those ready for more.
- A four-level CBC assessment rubric (EE, ME, AE, BE), homework, and a blank reflection space to fill in after teaching.

A TASTE OF LESSON 1

Components of Pre-Technical Studies

By the end of the lesson, the learner should be able to identify the components of Pre-Technical Studies

> **Pre-Technical Studies is a Junior School learning area that introduces the knowledge and skills used in technical work.**
> Its components, as in this design's strands: foundations (safety and computer concepts); communication (drawing, sketching and ICT tools); materials for production (metals and non-metals); tools and...

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Components of Pre-Technical Studies

Strand 1.0 Foundations of Pre-Technical Studies > Sub-strand 1.1 Introduction to Pre-Technical Studies | Lesson 1 of 4 | 40 minutes

SCHOOL	TEACHER	DATE
CLASS / STREAM	**TIME**	**ROLL (B / G)**

SPECIFIC LEARNING OUTCOME(S)

By the end of the lesson, the learner should be able to identify the components of Pre-Technical Studies

KEY INQUIRY QUESTION(S)

- Why is Pre-Technical Studies important in day-to-day life?

CORE COMPETENCIES, VALUES AND PCIS IN THIS LESSON

COMPETENCY	**Communication and collaboration**	Learners explain their thinking to a partner and report their findings to the group.
COMPETENCY	**Critical thinking and problem solving**	Learners choose a method, check their answers and give reasons for their choices.
VALUE	**Unity**	Learners share materials fairly and work as one team.
VALUE	**Respect**	Learners listen while others explain and accept correction politely.
PCI	**Social cohesion**	Learners work in harmony, include everyone and settle differences peacefully.

LEARNING RESOURCES

Pictures of technical careers | Charts | Learners' exercise books

ORGANISATION OF LEARNING

Whole class for the introduction and the summary; pairs or groups of four to five for guided practice; individual work for the independent tasks.

KEY WORDS

Pre-Technical Studies | technical | career | entrepreneurship | materials | tools | drawing | computing

THE LESSON AT A GLANCE

Introduction	Teacher models	Guided practice	On their own	Wrap-up
6 min	9 min	10 min	9 min	6 min

Inside this plan: the step-by-step lesson flow with what the teacher and learners do, the key content, practice questions with answers, a common mistake to watch for, an assessment rubric on the four CBC levels, support and extension ideas, homework and a reflection page.

LESSON FLOW

Stage	Minutes	The teacher	The learners
Introduction	6	Greet the class and ask: "Key question: why is Pre-Technical Studies important in day-to-day life? Name something at home that someone designed, made and sold." Take two or three answers, link them to earlier work, then state today's outcome.	Answer the starter question, recall what they already know and read the outcome aloud.
Step 1: Teacher models	9	Take learners through the key ideas on the next page, explaining as you go. Use pictures of technical careers, charts, learners' exercise books. Ask learners to predict what comes next before you show it.	Watch, predict the next step, ask questions and note the key steps in their exercise books.
Step 2: Guided practice	10	Give questions 1 and 2. Move round the groups, ask "How do you know?" and correct errors kindly on the spot.	Work in pairs or small groups, explain each step to a partner and check one another's answers.
Step 3: Independent practice	9	Set questions 3 and 4 for individual work. Mark as you walk round and note who needs help in the next lesson.	Work on their own, then swap books with a partner to check.
Summary and conclusion	6	Ask two or three learners to state the key idea in their own words. Give this exit question and check the answers: "Which component deals with starting a business?"	Say the key idea in their own words and answer the exit question in the exercise book.

KEY IDEAS

Pre-Technical Studies is a Junior School learning area that introduces the knowledge and skills used in technical work.
Its components, as in this design's strands: foundations (safety and computer concepts); communication (drawing, sketching and ICT tools); materials for production (metals and non-metals); tools and production (measuring, marking out and computer hardware); entrepreneurship (business ideas, production and money goals).
It joins thinking, making and selling: design it, make it, sell it.

PRACTICE QUESTIONS - WITH ANSWERS FOR THE TEACHER

No.	Question	Answer
1	Name three components of Pre-Technical Studies.	**Drawing, materials and entrepreneurship**
2	Which component deals with keeping people safe?	**Foundations (safety)**
3	Which component deals with metals and plastics?	**Materials for production**
4	Which component deals with starting a business?	**Entrepreneurship**

WATCH OUT FOR

Thinking the subject is only about computers or only about woodwork.

ASSESSMENT RUBRIC - THE FOUR CBC LEVELS

Level	What the learner can do
Exceeds expectations (EE)	Can identify the components of Pre-Technical Studies confidently and accurately, explain the method used, and apply the idea to new or unfamiliar problems.
Meets expectations (ME)	Can identify the components of Pre-Technical Studies accurately in familiar situations; notices and corrects slips without help.
Approaches expectations (AE)	Can partly identify the components of Pre-Technical Studies, or does so with prompts from the teacher or a partner; makes some errors.
Below expectations (BE)	Cannot yet identify the components of Pre-Technical Studies without direct help; needs the idea taught again with concrete objects.

SUPPORT AND EXTENSION

Learners who need support	Make a mind map with the five strands.
Learners ready for more	Which component interests you most? Why? (Answer: Answers will vary)
Inclusion	Seat learners with low vision near the board and read aloud whatever you write; use large, clear, tactile materials; allow extra time; pair with a patient partner; use gestures or Kenyan Sign Language for the key words.

HOMEWORK AND FOLLOW-UP

Redo questions 3 and 4 neatly in the exercise book. Then tell someone at home what you learned about "components of Pre-Technical Studies" and bring one question of your own to ask next lesson.

TEACHER SELF-CHECK

- Did every learner get a turn to handle materials or explain their thinking?
- Did most learners meet the outcome? Write down the names of those who did not.
- Was the pace right — did any step take too long or too short a time?
- Which competency and value did I see learners showing?
- What will I change the next time I teach this lesson?

REFLECTION ON THE LESSON / SELF-REMARKS

Write this after teaching - what worked, what to change, which learners need follow-up.

The role of Pre-Technical Studies in day-to-day life

Strand 1.0 Foundations of Pre-Technical Studies > Sub-strand 1.1 Introduction to Pre-Technical Studies | Lesson 2 of 4 | 40 minutes

SCHOOL	TEACHER	DATE
CLASS / STREAM	TIME	ROLL (B / G)

SPECIFIC LEARNING OUTCOME(S)

By the end of the lesson, the learner should be able to explain the role of Pre-Technical Studies in daily life

KEY INQUIRY QUESTION(S)

- Why is Pre-Technical Studies important in day-to-day life?

CORE COMPETENCIES, VALUES AND PCIS IN THIS LESSON

COMPETENCY	**Communication and collaboration**	Learners explain their thinking to a partner and report their findings to the group.
COMPETENCY	**Critical thinking and problem solving**	Learners choose a method, check their answers and give reasons for their choices.
VALUE	**Unity**	Learners share materials fairly and work as one team.
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LEARNING RESOURCES

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ORGANISATION OF LEARNING

Whole class for the introduction and the summary; pairs or groups of four to five for guided practice; individual work for the independent tasks.

KEY WORDS

Pre-Technical Studies | technical | career | entrepreneurship | materials | tools | drawing | computing

THE LESSON AT A GLANCE

Introduction	Teacher models	Guided practice	On their own	Wrap-up
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Inside this plan: the step-by-step lesson flow with what the teacher and learners do, the key content, practice questions with answers, a common mistake to watch for, an assessment rubric on the four CBC levels, support and extension ideas, homework and a reflection page.

LESSON FLOW

Stage	Minutes	The teacher	The learners
Introduction	6	Greet the class and ask: "A tap at school is leaking. Who fixes it, and what skills do they need?" Take two or three answers, link them to earlier work, then state today's outcome.	Answer the starter question, recall what they already know and read the outcome aloud.
Step 1: Teacher models	9	Take learners through "Roles in daily life" (key ideas on the next page), explaining as you go. Use pictures of technical careers, charts, learners' exercise books. Ask learners to predict what comes next before you show it.	Watch, predict the next step, ask questions and note the key steps in their exercise books.
Step 2: Guided practice	10	Give questions 1 and 2. Move round the groups, ask "How do you know?" and correct errors kindly on the spot.	Work in pairs or small groups, explain each step to a partner and check one another's answers.
Step 3: Independent practice	9	Set questions 3 and 4 for individual work. Mark as you walk round and note who needs help in the next lesson.	Work on their own, then swap books with a partner to check.
Summary and conclusion	6	Ask two or three learners to state the key idea in their own words. Give this exit question and check the answers: "Give one way it helps create jobs."	Say the key idea in their own words and answer the exit question in the exercise book.

KEY IDEAS

Roles in daily life
Safety at home, at school and online.
Repairing and maintaining items (a broken chair, a loose hinge).
Communicating ideas with drawings and ICT tools.
Choosing the right materials and tools for a job.
Making useful items and saving money.
Starting small businesses and creating jobs.

PRACTICE QUESTIONS - WITH ANSWERS FOR THE TEACHER

No.	Question	Answer
1	Give two roles of Pre-Technical Studies in daily life.	**Repairing items and staying safe**
2	How can drawing help a carpenter?	**It shows exactly what to make**
3	How can the subject help a family save money?	**By repairing and making items themselves**
4	Give one way it helps create jobs.	**Starting small businesses**

WATCH OUT FOR

Vague answers; ask for a real example.