

UNIVERSITY OF SWAZILAND

FACULTY OF EDUCATION

Re-Sit EXAMINATION PAPER July 2017:

COURSE NUMBER: PED277

COURSE NAME: CURRICULUM STUDIES - SCIENCE

TIME ALLOWED: 3 HOURS

- INSTRUCTIONS:
1. THIS PAPER HAS **SIX** QUESTIONS. QUESTION 1 IS COMPULSORY.
 2. ANSWER QUESTION 1 AND ANY **THREE** OTHER QUESTIONS.
 3. YOU WILL ANSWER A TOTAL OF **FOUR** QUESTIONS. EACH QUESTION IS WORTH 25 MARKS.
 4. DOCUMENTS REFERRED TO IN SOME OF THE QUESTIONS ARE ATTACHED. IF YOU DO NOT FIND THEM, ASK FOR THEM.
 5. ANY PIECE OF WRITTEN WORK WHICH IS NOT FOR MARKING PURPOSES MUST BE CROSSED OUT CLEARLY.

THIS PAPER MUST NOT BE OPENED UNTIL PERMISSION IS GIVEN BY THE
INVIGILATOR

Answer **question 1** and any **three** other questions from this paper.

Question 1

- a. Using the terms provided below, indicate which of them describe what is involved in the following situations:

(Learning styles, Constructivism, Scientific principles, Zone of Proximal Development, Accommodation and Assimilation)

- i. Moss said ‘I found the idea of moments to explain why my brother can lift me in the game of seesaw’.
 - ii. Lizzy tried to do her mathematics homework. She found that she could not do it until her big brother Sam asked her a few questions to help her.
 - iii. Thoko understands a concept after listening to explanation from the teacher while her friend struggles to do so.
 - iv. While learning, one learner found out that his initial understanding electricity was partially changed by a lesson and that his new understanding gave him new perspectives of the concepts involved.
 - v. A grade V class is involved in practical activities after which they give different but correct answers to question involving the concepts.
 - vi. Lenny noticed that whenever, mice increased in number, snake became more common in his vicinity and vice versa. (6)
- b. What are attainment targets? (3)
- c. List the **four** domains of learning (4)
- d. Classify the following objectives using Blooms taxonomy. By the end of the lesson students will be able to: (6)
- i. Justify the use of metallic materials in and electric kettle.
 - ii. Define an electric circuit.
 - iii. Select a conductor from a collection of objects

Total

[25 Marks]

Question 2

- a. Discuss the use of the ‘field trip’ or excursion method in teaching science showing its merits and de-merits. (10)
- b. Write a contextualised lesson for a Grade IV class on the topic ‘parts of a flower’ (15)

Total [25 Marks]

Question 3

- a. In **three** points describe the value of stating your intended outcome for a lesson. (7)
- b. Using the activity in Appendix A, Write **four** objectives: one from each of the four domains of learning. Objective should be of higher order and each should be clearly identified. (12)
- c. Write **three** key points for the activity (6)

Total [25 Marks]

Question 4

- a. Explain learning according to Vygotsky giving details of how this view differs from Piaget’s views of learning. (15)
- b. Supposing you are planning for a lesson on habitats; which of the following methods would be most suitable: lecture, demonstration, problem solving, excursion, discovery, laboratory work. Describe the method you have chosen and justifying your choice. (10)

Total [25 Marks]

Question 5

Describe **each** of the following teaching methods and show how you would use it to teach a topic on ‘**Water animal life**’ to a Grade 6 class (25)

- i. A lecture
- ii. Discovery
- iii. Demonstration
- iv. Excursion
- v. Questioning.

	Total	25 Marks
Question 6		
a) Write a lesson plan for a contextualised lesson on the topic “magnets”	(19)	
b) Write two questions you would use to assess learning in this lesson.	(6)	

Total **25 Marks**

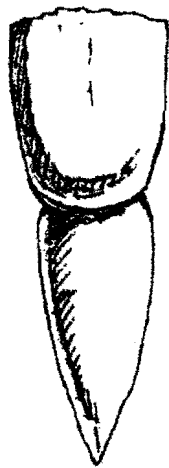
APPENDIX A

(d) Why do children's teeth fall out? _____

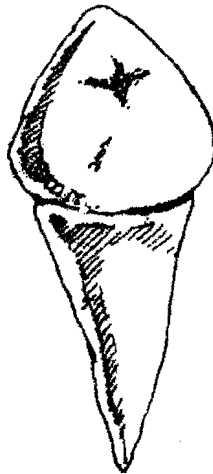
2. Are your teeth all the same size and shape? _____

What do you see? _____

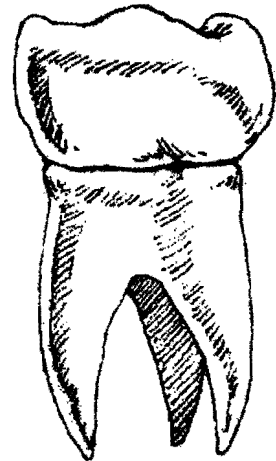
3. Look at the picture below. It shows the different kinds of teeth people have.



incisor



canine



molar

Work with a partner.

How many of each type of tooth does your partner have?

- Count and state the number of teeth they have.
- Identify and name the three main types of human teeth.
- Find out and state how many of each kind of tooth they have.

APPENDIX A

Write the number next to each type on the lines below:

Incisors: _____

Canines: _____

Molars: _____

4. Different kinds of teeth do special jobs when we eat. Draw lines to match the type of tooth and the job it does.

Incisors Grind food to make it soft.

Canines Cut food.

Molars Tear food into pieces.

- Count the number of each type of teeth they have.
- Match each type of tooth to its function.