### NAMIBIA SENIOR SECONDARY CERTIFICATE

DESIGN AND TECHNOLOGY ORDINARY LEVEL 4129/2

PAPER 2 1 hour 45 minutes

Marks 60 **2018** 

Additional Materials: A3 drawing paper

Non-programmable calculator Standard drawing equipment

#### INSTRUCTIONS AND INFORMATION TO CANDIDATES

- Answer on the separate A3 drawing paper provided.
- Write your Centre Number, Candidate Number and Name on all the work you hand in.
- Do not use correction fluid.
- There are three questions in this Question Paper.
- Answer one question only.
- At the end of the examination, fasten all your work securely together.
- The number of marks is given in brackets [ ] at the end of each question or part question.

This document consists of 4 printed pages.



Republic of Namibia
MINISTRY OF EDUCATION, ARTS AND CULTURE

There are **three** questions in this question paper.

Answer one on the A3 drawing paper provided.

## 1 Design Communication

With careful planning, a big room can be transformed into a flat.

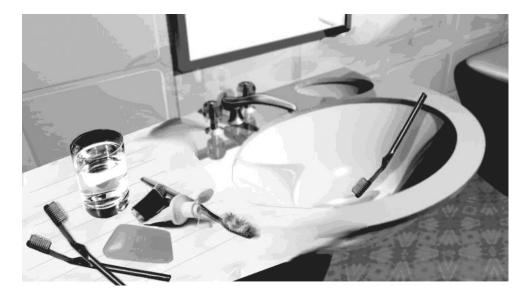


A floor plan to convert a big room into a flat, approximately 4 m x 5 m, is required. The floor plan should make provision for a bathroom (with toilet, shower and basin), bedroom and kitchenette.

(a)	List <b>four</b> additional specification points for the floor plan.	[4]
(b)	Use graphics to show <b>two</b> possible symbols that could be used to indicate the bathroom.	[4]
(c)	Explore and sketch <b>three</b> ideas for a floor plan for the flat.	[15]
(d)	Evaluate your ideas in <b>(c)</b> and justify the selection of the idea you have chosen to develop.	[8]
(e)	Draw, using any suitable method, your final design solution. Include all major detail, graphics and keys.	[18]
(f)	Suggest suitable materials to make architectural models of buildings.	[4]
(g)	Use sketches and notes to describe how a scale model of your solution could be made in a school workshop.	[7]
		[60]

### 2 Resistant Materials

A bathroom could become very untidy if toiletries and other utensils are not properly stored.



You are required to design a suitable unit to store toiletries and other relevant utensils in a bathroom.

Your design should make provision for six tooth brushes, a tube of toothpaste and a glass.

It should be fitted with a means so that it could be fixed to the wall near the basin.

(a)	List <b>four</b> additional specification points for such a unit.	[4]
(b)	Describe <b>two</b> methods of fixing such a unit to a wall.	[4]
(c)	Explore and sketch three ideas for such a unit.	[15]
(d)	Evaluate your ideas in <b>(c)</b> and justify the selection of the idea you have chosen to develop.	[8]
(e)	Draw, using any suitable method, your final design solution. Include dimensions and construction details of the unit.	[18]
(f)	Suggest suitable materials for your solution and give reasons for your choice.	[4]
(g)	Use sketches and notes to describe how your solution could be made in a school workshop.	[7]
		[60]

# 3 Technology

In winter, some people find it difficult to wake up even if their alarm clocks ring.



A system to squirt a tiny water stream at the wake-up time, is required.

(a)	List <b>four</b> additional specification points for the system.	[4]
(b)	Describe <b>two</b> mechanisms that could be used to squirt the water.	[4]
(c)	Explore and sketch <b>three</b> ideas for a such a system.	[15]
(d)	Evaluate your ideas in <b>(c)</b> and justify the selection of the idea you have chosen to develop.	[8]
(e)	Draw, using any suitable method, your final design solution. Include dimensions and construction details of the system.	[18]
(f)	Suggest suitable materials for your solution and give reasons for your choice.	[4]
(g)	Use sketches and notes to describe how your solution could be made in a school workshop.	[7]

[60]