

**TAVUA COLLEGE  
YEAR 10 BASIC TECHNOLOGY  
WORKSHEET 2**

**MONDAY (21/06/2021) & TUESDAY (22/06/2021)**

Possible Solution 2

**Problem**

In most kitchens, utensils are seen just lying on tables and on top of sinks after the members of the household have had their meals. This makes the kitchen area look untidy when visitors come.

**Brief**

Design a **cutlery set** that will ease the problem.

**Specifications**

The following factors are to be taken into consideration when designing the CUTLERY SET.

1. The material to be used for the construction are readily available.
2. The Cutlery set should be able to hold a maximum of 6 utensils per compartment. e.g. 6 tea spoon, 6 forks, 6 knives etc.
3. It must be light, strong and portable.

**Requirements**

- (i) In the space provided, draw **two** possible solutions for the **cutlery set** in any form of pictorial drawing.

Possible Solution 1



- (ii) In the space provided below, sketch the **final solution** in pictorial drawing.



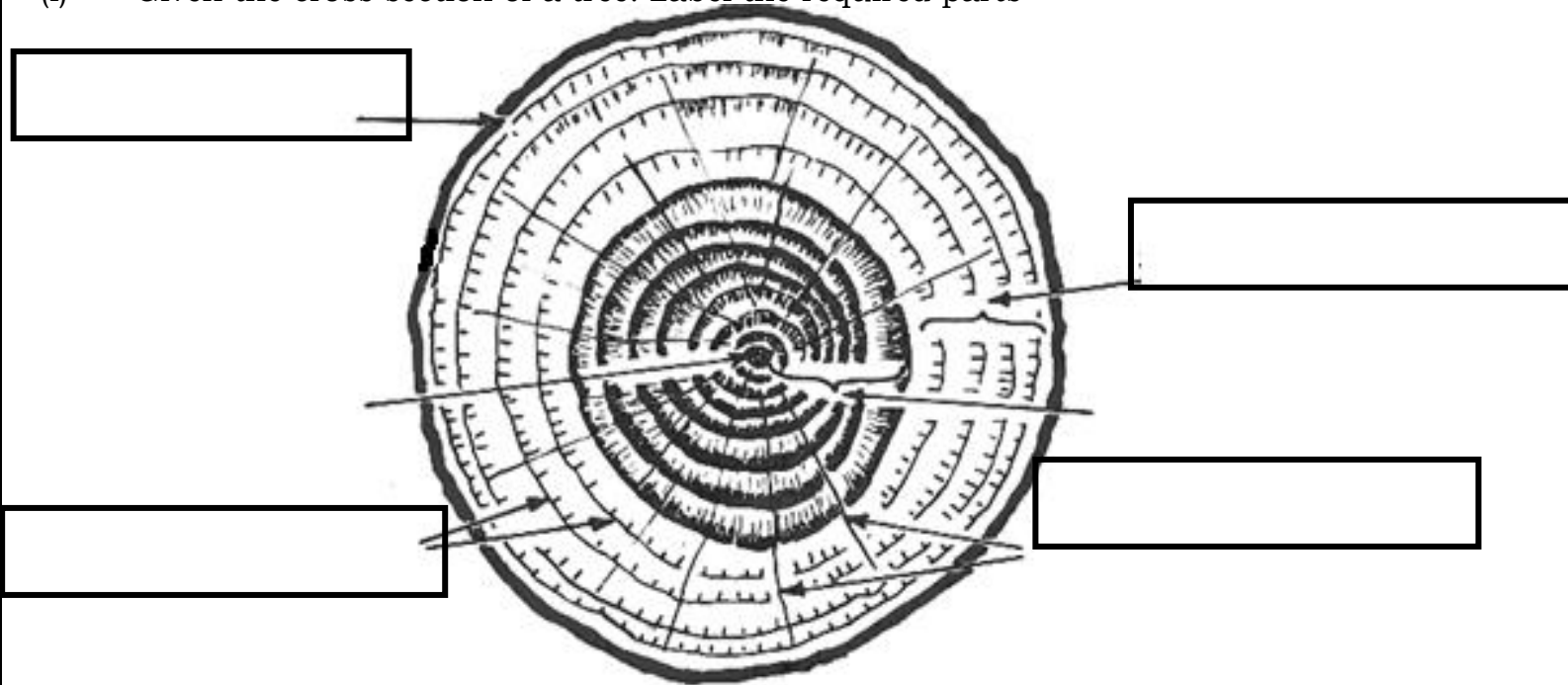
Name a local timber and the type of finish that can possibly be used for the CUTLERY SET.

Local timber : \_\_\_\_\_

Type of finish : \_\_\_\_\_

**WEDNESDAY (23/06/2021) & THURSDAY (24/06/2021)**

(i) Given the cross section of a tree. Label the required parts



(ii) Beside the given names, draw the symbols.

Earth

Concrete

(iii) Complete the given table below.

| Primary | Secondary     |        | Tertiary        |                 |
|---------|---------------|--------|-----------------|-----------------|
| Red     | red + yellow  | Orange | red + orange    | red – orange    |
|         |               |        | yellow + orange | yellow – orange |
| Yellow  | yellow + blue |        |                 |                 |
|         |               |        |                 |                 |
|         |               |        |                 |                 |

(iv) Differentiate between ferrous and non ferrous metals with examples?

**Ferrous metals:**

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Example: \_\_\_\_\_

**Non ferrous metals:**

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Example: \_\_\_\_\_

(v) Differentiate thermosetting plastics and thermo plastics. Give examples of each.

**Thermo plastics:**

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Example: \_\_\_\_\_

**Thermosetting plastics:**

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Example: \_\_\_\_\_

**FRIDAY (25/06/2021) & MONDAY (28/06/2021)**

**GEOMETRICAL CONSTRUCTION**

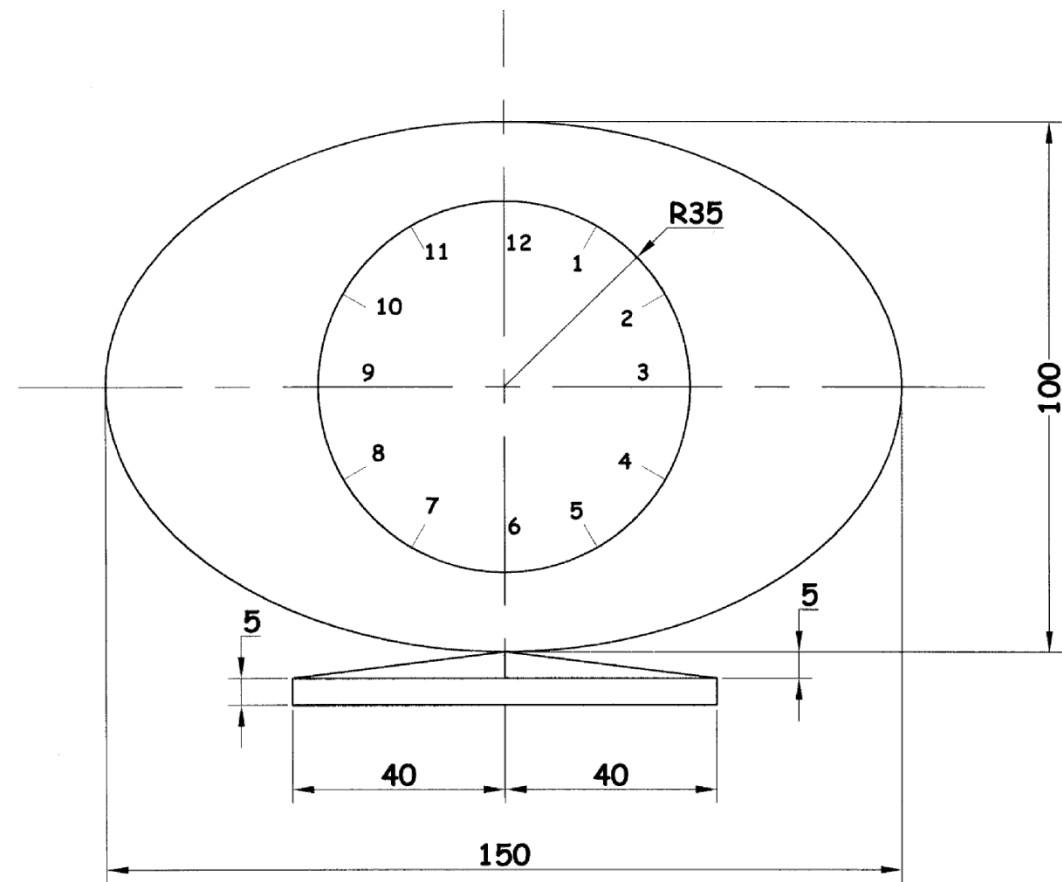
Given below is a sketch of a **clock** that has an elliptical frame.

**Required**

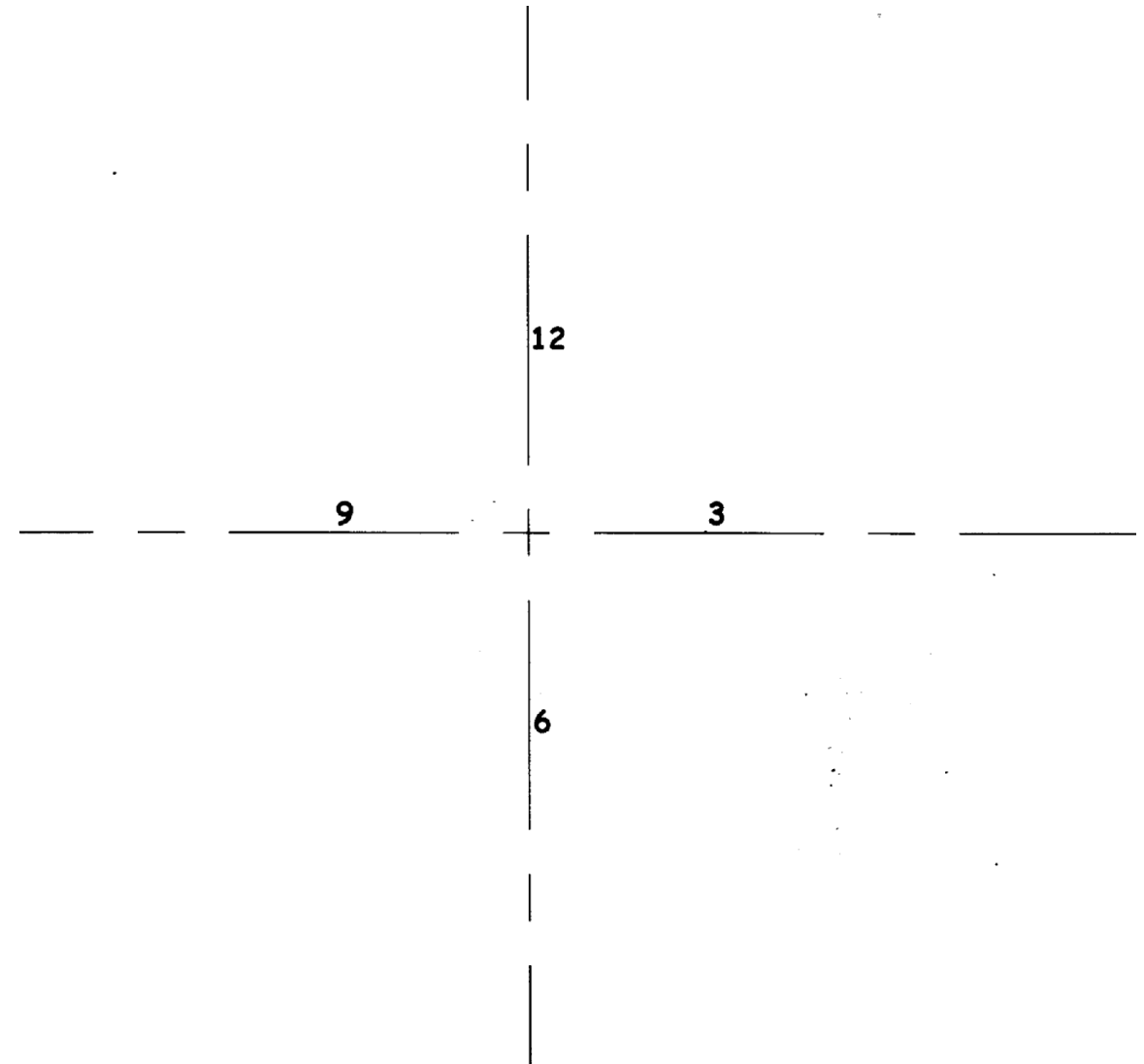
Use the given measurements to draw a full-size drawing of the **clock**.  
For the elliptical shape, use either intersecting arcs or concentric circles method.

The diagram is partly drawn for you. Show all construction lines and points of contacts.

**Note**  
All dimensions are in millimeters.



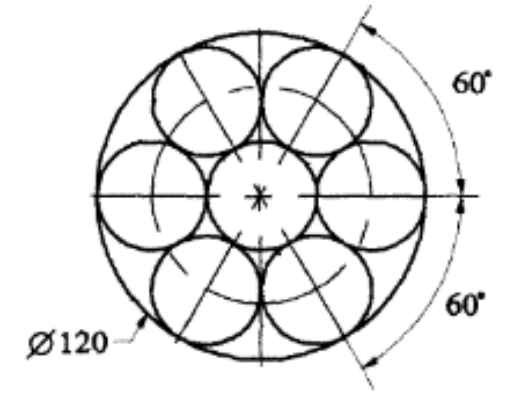
**Sketch: NTS**



**TUESDAY (29/06/2021) & WEDNESDAY (30/06/2021)**

THE Sketch on the right shows an egg tray. Study the sketch and using geometrical method redraw the sketch to the given dimension. Use the given center lines.

**Circles  
Egg Tray**



1. CONSTRUCT A REGULAR PENTAGON USING THE GIVEN SIDE.  
REDUCE IT TO A SCALE 5:3



2. ENLARGE THE GIVEN HEXAGON TO A SCALE OF 3:4

