SAFETY BAY SENIOR HIGH SCHOOL

imagine believe achieve

Year 8 Microscope Assessment

Name: ANSWERS

Form: _____

Total Marks: _____ **/ 23**

Attempt all of the following questions.

1) Provide information of 2 people that contributed to the development of the microscope by completing the table below: (6 marks)

Person (1 x 2)	Date (1 x 2)	Contribution (1 x 2)
Anhony Van Leewenhock	≈ 300 years ago	Developed an object with lenses that enabled magnification x 270 normal size.
Ernst Ruska	1933	Built first electron microscope

2) Outline the main difference between how the light microscope and the electron microscope work. (2 marks)

Light → uses rays of light to focus an image on the eye. (1)

Electron → uses beams of electrons (1)

3) Explain the main difference between the TEM (Transmission) and the SEM (Scanning electron microscope). (2 marks)

TEM → Shows internal structure of cell (1)

SEM → Shows images of the surface features (1)

4) Provide any two reasons why microscopes are useful: (2 marks)

eg assists us to see objects to small to be seen with the naked eye. (1)

medical → check amount/normality of cells for diseases / deficiencies etc. (1)

5) List any 3 safety rules to be considered when using a microscope. (3 marks)

→ Look from side when adjusting and focusing objective lenses (1)

→ Carry microscope / box properly (1)

→ Be careful of light which may burn due to heat.

6) Describe what happens to an image when viewed under a microscope. (2 marks)

upside down (1)

inverted / flipped (1)

7) Complete the following table for a standard light microscope : (6 marks)

Eye Piece/ Occular lens	Objective lens	Total Magnification
10x	4x	x 40
10x	10x	x 100
10x	40x	x 400