

Grade 8 - Unit 1: Binary and Online Graphics

Instructions:

- Answer all questions.
 - Use diagrams where necessary.
 - Write neatly and clearly.
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1. What are the instructions for creating Vector graphics?

2. Key benefits of vector graphics

3. What are the real-world applications of vector graphics?

4. Explain the term resolution using a diagram.

5. Explain pixels per inch (PPI).

6. What is the relation between file size, resolution, number of pixels, and image quality?

7. Explain 1080P, 4K, 8K, and 16K resolution with diagrams.

8. Describe Gradient in Bitmap images.

9. Give 4 Bitmap image types.

10. Compare Vectors vs Bitmaps according to the following criteria:

- File size
- Image Quality
- Scaling
- Use of colors

11. What is a binary word?

12. What software application is suitable for creating Vectors?

13. What software application is suitable for creating Bitmaps?

14. In commercial publications such as magazines, what is the recommended image PPI value?

15. If the image PPI value is lower than the above-mentioned value, what will happen?

16. How many colors can be represented in a 1-Bit graphic? What are they?

17. Explain what Color depth is.

18. Using 7 bits per pixel, how many colors can be generated?

19. In a 2-Bit graphic, how many colors can be generated and what are they?

20. Write the binary values for the above-mentioned colors in a 2-Bit Graphic.

21. If a smartphone display consists of 24-Bit, how many possible colors can be created?

22. Explain the equation used for finding FILE SIZE.

23. There is a 3-Bit graphic, and the Height x Width is 10 x 8 Pixels. Calculate the file size of this image.

Online Classes

COMPUTER SCIENCE

Special class

3 Months

For Practicals

- Programing - **Python** - Zero to Hero
- Spreadsheet - **Excel** - From Basic to advanced Theories
- **Scratch** Program Development

Monday 7.30-9.30 PM **Grade 5 6 7**

Friday 7.30-9.30 PM **Grade 8 9 O/L**

**The class will start on
October 3rd**

Contact us for registration

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