Year 8 Term 2 Computing test

Topic 2: Data on the web

Pearson

Name: _____

Class: _____ **Date:** _____

1 Mr Agarwal is putting together some notes for a student revision guide on data storage.

a) Complete the table below.

Unit of storage	Equivalent units of storage
1 kibibyte (KiB)	
	1024 kibibytes
	1024 mebibytes

3

b) The International Electrotechnical Commission units of storage are base-2 units. 3.3.4

What units are used for data transfer? Tick **one** box.

A base-10 ☐

B base-2 ☐

C base-32 ☐

D base-8 ☐

1

2 Mira is organising her files into folders.

She has found four types of file: photo, document, video, music.

a) List the four types of file in order of typical file size. Put the **smallest** first.

1

b) One word-processed document is 8,000,000 bits in size.

How many bytes is this? Tick **one** box.

A 640,000 ☐

B 1,000,000 ☐

C 8000 ☐

D 102,400 ☐

1

c) Some of the video files that Mira has found are billions of bits in size.

What would be the most appropriate unit of storage?

1

3 When you are creating graphics for a smartphone game, it is important to keep file sizes small. A programmer is using RLE to do this.

a) What does RLE stand for? Tick **one** box.

A Real Level Enhancement ☐

B Robust Letter Encoder ☐

C Run Length Encoding ☐

D Risk Limitation Encoder ☐

1

b) Convert these Black (B) and White (W) image sequences using RLE.

(i) WWWWBBWBWWWBBB

(ii) BBBBBWWWBWWWWBBB

2

4 Sometimes programmers need to keep a file in its original state and not lose any information by using compression.

Describe **two** situations when you should **not** use lossy files.

1

2

2

Total for test: 12 marks

My score: ☐ marks

What went well

How to improve