

Exercise #1 Answers

Exercise 1A:

1 bit = 1.6 MB
8 bit = 12.8 MB
24 bit = 38.4 MB

Extra Credit:

$38.4 \text{ MB} \times 200 = 7,680 \text{ MB} (7.68 \text{ GB})$

A good quality CDROM holds about 650 MB of data.

12 CDs.

Exercise 1B:

- a. 18,874,368 bytes or 18,432 kilobytes (c. 19 megabytes)
- b. 800 x 600 pixels (low end of Local History Project) = 1.4 MB

Group Discussion:

- ◆ Discuss resolution as it applies to your project materials. Use your samples to think about the whole collection.
 - Images: Is there significant information in fine detail of images?
 - Texts: Are source texts legible or difficult to read?

A handy table for reference

Name	Abbr.	Size
Kilo	K	$2^{10} = 1,024$
Mega	M	$2^{20} = 1,048,576$
Giga	G	$2^{30} = 1,073,741,824$
Tera	T	$2^{40} = 1,099,511,627,776$
Peta	P	$2^{50} = 1,125,899,906,842,624$
Exa	E	$2^{60} = 1,152,921,504,606,846,976$
Zetta	Z	$2^{70} =$ 1,180,591,620,717,411,303,424
Yotta	Y	$2^{80} =$ 1,208,925,819,614,629,174,706,176