Name: _____

1. You take a look around your classroom one day and note what color shirts your classmates are wearing, collecting the following data.

Purple	Blue	Black	Purple	Blue	Black	Pink	Purple	Purple	Red
Black	Blue	Orange	Orange	Blue	Red	Orange	Pink	White	Purple
Green	Orange	White	Purple	Black	Yellow	Green	Red	Pink	Orange

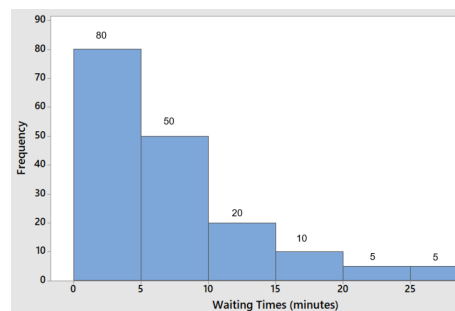Use the data collected to construct a **frequency** and **relative frequency** distribution.

Color	Frequency	Relative Frequency
Red		
Orange		
Yellow		
Green		
Blue		
Purple		
Pink		
Black		
White		
Total		

2. Consider the following scores that Miss Frizzle's students made on their Biology final exam.

$$51 \quad 57 \quad 59 \quad 62 \quad 64 \quad 65 \quad 65 \quad 68 \quad 71 \quad 72 \quad 74 \quad 78 \quad 78 \quad 78 \quad 79 \quad 80$$

$$83 \quad 83 \quad 85 \quad 86 \quad 87 \quad 87 \quad 87 \quad 89 \quad 89 \quad 90 \quad 91 \quad 93 \quad 93 \quad 94 \quad 95 \quad 97$$

$$97 \quad 98 \quad 98 \quad 99 \quad 100$$

Construct a **stem-and-leaf plot** of the exam scores. Include a **key**.

3. Consider the following histogram of waiting times (in minutes) for a sample of 170 patients at Grey Sloan Memorial Hospital.

(a) Describe the **shape** of the distribution.

(b) What **class width** was chosen for the histogram? (Include units in your answer.)

(c) How many patients had to wait **longer than** twenty minutes?

(d) What is the **relative frequency** of patients who waited less than five minutes?