What Determines the Sex of a Child?

Some diagrams provide information in a chart. Study the charts.

		Father	
		Х	Υ
her	X	XX	ΧY
Mother	Х	XX	XY

Ratio of offspring

XX:
$$\frac{2 \text{ boxes}}{4 \text{ boxes}} = 50\%$$

XY:
$$\frac{2 \text{ boxes}}{4 \text{ boxes}} = 50\%$$

Answer these questions about the diagram above.

- 1. What type of illustration is shown?
- 2. What do the letters represent? _____
- 3. Why are two letters written under both the mother and the father?
- 4. What does XX represent? _____
- 5. What does XY represent?
- 6. What are the possible outcomes of this cross?
- 7. According to the chart, what is the ratio of males to females in the offspring? _____