

Set Building Activity

Your group (write all five names):

1. _____

2. _____

3. _____

4. _____

5. _____

Part 1 Pets & Chocolate

For each set below, write the names of *everyone in your group* who belongs in it.

$P = \{ \text{people who have a pet} \}$

names:

$C = \{ \text{people who like chocolate} \}$

names:

$P \cap C = \{ \text{people who have a pet AND like chocolate} \}$

names:

$P \cup C = \{ \text{people who have a pet OR like chocolate} \}$

names:

Part 2 Make your own sets

As a group, invent your *own* two sets. Fill in a rule for each:

$A = \{ \text{_____} \}$

$B = \{ \text{_____} \}$

Now sort your group. Write the names that belong in each set:

$A = \{ \text{people in your set } A \}$

names:

$B = \{ \text{people in your set } B \}$

names:

$A \cap B = \{ \text{people in } A \text{ AND } B \}$

names:

$A \cup B = \{ \text{people in } A \text{ OR } B \}$

names:

$A \setminus B = \{ \text{people in } A \text{ but NOT } B \}$

names:

$B \setminus A = \{ \text{people in } B \text{ but } \mathbf{NOT} A \}$

names:

$(B \setminus A) \cup B = \{ \text{people in } (B \setminus A) \mathbf{OR} B \}$

names:

$B \setminus (A \cap B) = \{ \text{people in } B \text{ but } \mathbf{NOT} (A \cap B) \}$

names:

Part 2 Draw your Venn diagram

Write *each group member's name* in the correct region. Anyone in neither set goes in the box *outside* both circles.

