Part-Whole models for addition and subtraction homework. Name:

1. What names are we using for each diagram?

w

p

p

w

p

p

|  |  |
| --- | --- |
| What are we calling this kind of diagram? (give both names): | What are we calling this kind of diagram? (give both names): |

2. What are some advantages of teaching with part-whole language and diagrams for solving addition and subtraction problems?

3. If 9 – 6 = ? could be used to solve a part unknown problem, what addition sentence could be used to solve the same problem?

4. For each of these problems, type into the part-whole and number bond diagrams to show how to think of the problem in a part-whole way. Make sure you indicate which is the **missing/unknown** (for example with a “?”) in the problem, and label the part-whole diagram using **words** as well as **numbers**:

a. Sandy had 4 toy cats. When she cleaned her room, she found some more toy cats, and then she had 7 toy cats. How many toy cats did she find?

w

p

p

w

p

p

b. Connor had 12 marbles. He lost some of his marbles. Now he has 8 marbles left. How many marbles did he lose?

w

p

p

w

p

p

c. Janet sold 14 cookies at the bake sale. She had 5 cookies left at the end. How many cookies did she have to start with?

w

p

p

w

p

p

d. Rita had 9 toy horses. Shauna had 5 toy horses. How many fewer toy horses did Shauna have than Rita?

w

p

p

w

p

p

e. Michelle has 10 crystal rocks. Joe has 4 fewer crystal rocks than Michelle. How many crystal rocks does Joe have?

w

p

p

w

p

p