**Big Idea 3: Joining, Separating and Comparing**

**Sorting Activity**

**Materials:**

* One Sorting Activity Blackline master per group
* Answer Key: One copy per person

**Preparation:**

* Print and cut apart the Sorting activity Blackline Master (NOT including the answer key). Place in an envelope. You need one of these per group.
* Print out the answer key but do NOT hand out until after the sorting activity is done.

**Instructions:**

* Groups are to read the 9 word problems and sort them based on criteria of their choice. They must be prepared to share their criteria / category headings.
* Once a group has created a sort, ask them to sort using different criteria.
* If a group has time, ask them to see if they can find a subset sorting option.
* Large Group Sharing: Once all groups have had a chance to sort, ask them to share their sorting rules with the rest of the participants. The presenter can introduce the terms joining, separating and comparing. When one group shares their criteria, ask if other groups used the same criteria.
* Repeat with other sorting options.
* Display and handout the answer key and discuss.

**Sorting Activity Blackline Master**

|  |  |  |
| --- | --- | --- |
| Sally has $75. She has $30 more than John. How much money does John have? | Sally has $35.25.  She earns $58.85. How much does she have at the end of the day? | Sally has $57.  She gives $32 to pay her mother back. How much money does she have left? |
| Sally has a few dollars. John has $7. Together they have $13.  How much does Sally have? | Sally has $28.  She buys a gift.  She is left with $20. How much was the gift? | Sally has $5.25. John has $3.90. How much more does Sally have than John? |
| Sally has some money in her wallet.  She spends $15 at the store.  She has $41 left. How much money did she start with? | Sally has $42.  John has $15 more than Sally. How much money does John have? | Sally has $28. How much more money does she need to save if she wants to buy a $37 game? |

**ANSWER KEY**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Join** | **Separate** | **Compare** |
| **Result Unknown** | Sally has $35.25.  She earns $58.85.  How much does she have at the end of the day? | Sally has $57.  She gives $32 to pay her mother back.  How much money does she have left? | Sally has $75.  She has $30 more than John.  How much money does John have? |
| **Start Unknown** | Sally has a few dollars. John has $7.  Together they have $13.  How much does Sally have? | Sally has some money in her wallet.  She spends $15 at the store.  She has $41 left.  How much money did she start with? | Sally has $42.  John has $15 more than Sally.  How much money does John have? |
| **Change Unknown** | Sally has $28.  How much more money does she need to save if she wants to buy a $37 game? | Sally has $28.  She buys a gift.  She is left with $20.  How much was the gift? | Sally has $5.25.  John has $3.90.  How much more does Sally have than John? |

**Blank Copy**

Create a question that fits each category.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Join** | **Separate** | **Compare** |
| **Result Unknown** |  |  |  |
| **Start Unknown** |  |  |  |
| **Change Unknown** |  |  |  |