SPIRAL Activity Guide
UPS Check Attack Strategy

Whenever we see a word problem, what do we need to do?

Check for a table or a graph.

Exactly! Is there a table or a graph?

If yes: Number the graph. Make sure to check for a key or special directions below the graph to assist with numbering the graph.

If no: Move on to U.

Follow the UPS Check poster.

What does the U stand for?

Understand (read and explain).

Let's read the problem!

Read the problem or allow the student to read the problem, if time permits.

Great! What do we need to do after we read the problem?

Underline the label and cross out irrelevant information.

Exactly. First, look at the question sentence to see if it helps with the label. Remember, the question sentence is the sentence that starts with the capital letter and ends with the question mark. Where is the question sentence? What is our label?

(Responds.)

Let's underline our label now.

(Underlines.)

Before we move to the P in UPS Check, we need to check for irrelevant information. We only use numbers in the problem that tell us about __ (fill in blank with label). A number that tells us about other things is irrelevant information. In this problem, do you see any number that is not about our label?

Yes/No.

If student says no and is correct: **That's right. We need all the numbers in this problem to find our answer.**

If student says no but is incorrect: **One of the numbers in this problem is irrelevant. You don't need one of these numbers** (point) **to find your answer. Look again more carefully and explain to me which number is irrelevant.**

If student says yes and correct: **Right. The number of __** (fill in blank with irrelevant information) **is irrelevant information.**

If student says yes but is incorrect: **Let's look again at this problem.** *Explain why we need each number. As you explain, engage the student by asking questions.*

If there is irrelevant information: **So we've figured out that __** (fill in blank with irrelevant information) **is irrelevant. We don't need this number** (point) **to solve the word problem. What do we do with irrelevant information?**

Cross it out.

Excellent. Let's do that now. What does P stand for?

Plan.

Yes. Let's plan by figuring out how we will solve the problem. To figure out how we want to solve the problem, let's figure out the schema(s). Once we determine the schema(s), we can use our schema equation or graphic organizer to set up the problem.

Let's re-read the problem. Do you think we are putting parts together for a total? Are we comparing two amounts for a difference? Is there a starting amount that increases or decreases to a new amount? Are there groups with an equal number in each group? Is there a set compared a number of times? Or is this problem a multi-step problem?

What is the problem type?

Total/Difference/Change/Equal Groups/Set or Comparison/Multi-Step.

Depending on the problem type, skip to appropriate section.

T Total

Is this a Total problem? Are parts put together into a total?

Yes.

You're right. The problem puts __ and __ together. It's a Total problem. The question wants us to find how many __ altogether. So we're putting __ together. I put T next to the problem to remind me it's a Total problem.

(Writes.)

Now that we have planned, we are ready for our next steps. What's next?

Solve (set up and do the math) and check (see if our answer makes sense).

Exactly! We said this is a Total problem. (Point to T.) **Now we can use the Total poster or graphic organizer to solve by setting up and doing the math. Then, we can check to see if our answer makes sense.**

Follow the Total Schema Activity Guide.

D Difference

Is this a Difference problem? Are two amounts compared for a difference?

Yes.

You're right. The problem compares __ and __. It's about a difference. I put D next to the problem to remind me it's a Difference problem.

(Writes.)

Is this a Difference problem? Are two amounts compared for a difference?

Yes.

You're right. The problem compares __ and __. It's about a difference. I put D next to the problem to remind me it's a Difference problem.

(Writes.)

Now that we have planned, we are ready for our next steps. What's next?

Solve (set up and do the math) and check (see if our answer makes sense).

Exactly! We said this is a Difference problem. (Point to D.) **Now we can use the Difference poster or graphic organizer to solve by setting up and doing the math. Then, we can check to see if our answer makes sense.**

Follow the Difference Schema Activity Guide.

C Change

Is this a Change problem? Is there a starting amount that increases or decreases to a new amount?

Yes.

You're right. This question gives/asks for a starting amount. The amount changes to a new end amount. I put C next to the problem to remind me it's a Change problem.

(Writes.)

Now that we have planned, we are ready for our next steps. What's next?

Solve (set up and do the math) and check (see if our answer makes sense).

Exactly! We said this is a Change problem. (Point to C.) **Now we can use the Change poster or graphic organizer to solve by setting up and doing the math. Then, we can check to see if our answer makes sense.**

Follow the Change Schema Activity Guide.

EG Equal Groups

Is this an Equal Groups problem? Are there groups with an equal number in each group?

Yes.

You're right. There are groups with an equal number in each group. I put EG next to the problem to remind me it's an Equal Groups problem.

(Writes.)

Now that we have planned, we are ready for our next steps. What's next?

Solve (set up and do the math) and check (see if our answer makes sense).

Exactly! We said this is an Equal Groups problem. (Point to EG.) **Now we can use the Equal Groups poster or graphic organizer to solve by setting up and doing the math. Then, we can check to see if our answer makes sense.**

Follow the Equal Groups Schema Activity Guide.

S Set/Comparison

Is this a Set/Comparison problem? Is there a set compared a number of times?

Yes.

You're right. This question gives us a set compared a number of times. I put S next to the problem to remind me it's a Set/Comparison problem.

(Writes.)

Now that we have planned, we are ready for our next steps. What's next?

Solve (set up and do the math) and check (see if our answer makes sense).

Exactly! We said this is a Set/Comparison problem. (Point to S.) **Now we can use the Set/Comparison poster or graphic organizer to solve by setting up and doing the math. Then, we can check to see if our answer makes sense.**

Follow the Set/Comparison Schema Activity Guide.