PBL in Middle School, PBL Summit June 2015

REFLECTION HELPERS FOR STUDENTS

•What did you learn by solving this problem?

•In what way(s) did the answer surprise you?

•What was challenging about this problem?

•What other way(s) of solving the problem did you consider or learn from others?

•What did you enjoy (or not enjoy) about solving this problem?

•If you worked with a partner, how did that collaboration help you?

•If your work with a partner was not helpful, what could you have done differently?

•Did you try something and come to a dead end? If so, how did you decide what to do next?

•How did this problem relate to (or remind you of) other problems you have solved?

•Was the problem realistic?

•Can you think of another problem to solve based on this one (in other words, a good "I wonder")?

•What math skill(s) did you discover or use in solving this problem?

•What specific math skill(s) could you practice that would make it easier to solve a problem like this?

•What did you enjoy about this problem?

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LANGUAGE HELPERS FOR TEACHERS

FACILITATING GROUPS

•Help students listen to each other. Overtly orchestrate conversation when necessary.

•Ask another member, "what do you think of what …. said"

•Model questioning language and speaking respectfully for students.

•What might be a good first step?

•What would make this easier?

•What do you wish you knew?

•How could you find that out?

•What do you think the answer is going to look like?

•What were you thinking when you _____?

•I wonder if you could …use a table (or other technique if scaffolding is warranted).

•What do you think would happen if ___? (Simpler case, extension case)

•How does this smell to you? (Is it realistic)

•What do you think (the formula) might be?

•Can you explain to your partner what you did?

SHARING LANGUAGE

•WHO WOULD LIKE TO SHARE?

•Who has a different approach?

•Who found a different answer?

•Is _____correct?

•Why did _____ do this next?

•What could you do next?

•What do you think of that?

•What did you like about this problem?

•What made this problem challenging?