Classroom Structures That Inspire Students to Want More

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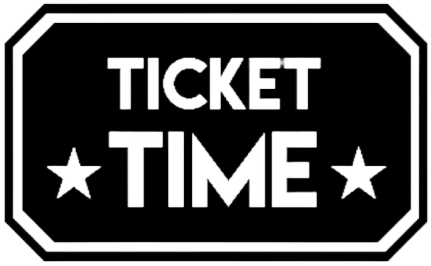
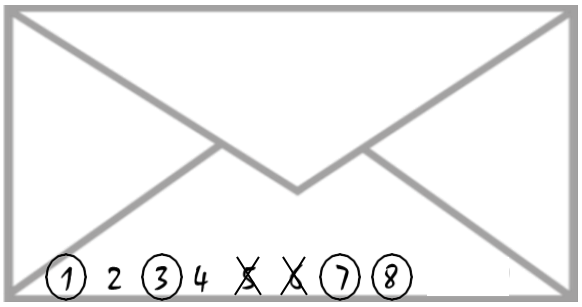


PARTNER MATH

Next Steps...

TICKET TIME INSTRUCTIONS



Overview:

Ticket Time is an activity where students solve problems at different ticket centers, check their answers and then record both individual and class data for missed items.

Supplies Needed:

- Envelopes for each student or partner set
- Individual tickets for the ticket centers
- Peek Sheets (answers)
- Ticket Center Number Tents (Optional)

Directions:

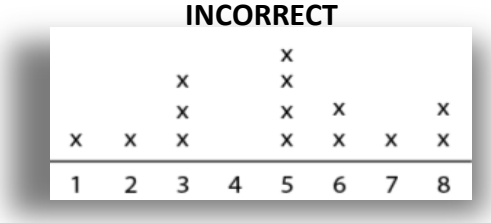
1. Print 8 to 10 tickets (based on teacher preference and time allotted to the activity) for a standard as well as the single page "peek sheet" answer sheets for each of the tickets.

2. Assign partners based on mixed abilities. Give each partner set an envelope in which they should number the outside 1 to 8 (or the number of tickets created). They should also put their names on the envelope.

3. Students should be given a set amount of time to visit as many ticket centers as they can. The partners should switch off who is the writer at each ticket center.

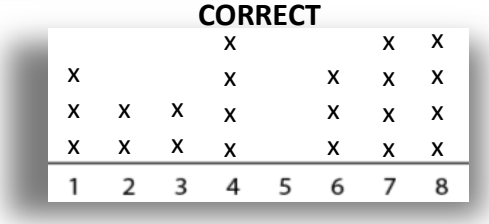
4. After visiting each ticket center, students should take their ticket and find the corresponding "peek sheet" (possibly all placed in one location in the room). They should correct their answer and mark their results on the envelope by either circling the ticket center number on their envelope if they got it correct or putting an X through the number if they missed any part of the problem. The ticket should then go in their envelope.

INCORRECT



5. Class line or dot plots can be used to collect data throughout the activity. If a partner set misses a ticket, they should mark it on the class data display marked "Incorrect". Another plot can be used to show items that partner sets got correct. This can lead to post-activity discussion about tickets that were most-missed as well as recognizing the questions the class did well on.

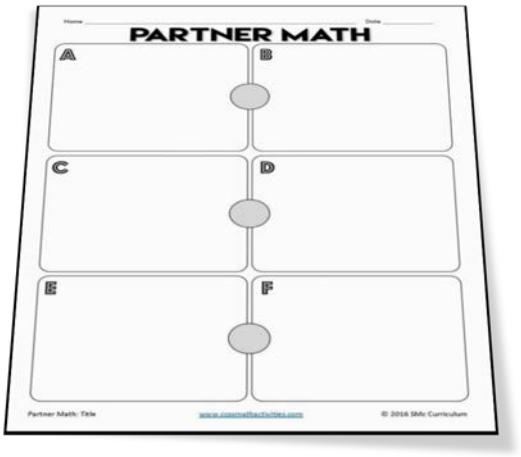
CORRECT



6. Towards the end of the activity, you may want students to collect all tickets from the centers they have not yet visited. That way, once they return to their desks for the class discussion, they have all the questions in front of them for post-activity discussion.

7. The activity can be wrapped up by looking at student work on tickets for problems that were most missed (like Item 5 in the display above) or by giving students additional time at their desks to look over any items they missed or did not complete and make corrections.

PARTNER MATH INSTRUCTIONS



Overview:

Partner Math is useded for standards that have a focus of procedural skills or one-step applications such as whole/rational number operations or evaluating expressions. Students complete two problems with a partner followed by a rotation where they compare answers with a new partner and then do two additional items.

Supplies Needed:

- Partner Math template (optional: print in two colors)
- Ten items to be used for the regular rotations and two challenge problems.

Directions:

1. Students should be separated into two groups using formative or self-assessment ratings on the standard addressed in the Partner Math activity. Students still struggling with the content should be given one color of the Partner Math template while students who have shown proficiency in the standard should be given a second color of the template. The two groups need to be equal in size.

2. Next, students find a partner with a different color template and sit next to them. Two problems (Task A and B) addressing the standard are projected or written on the board. Students work with their partner to solve the problems. Both students write on their own papers but work together to reach the same solutions.

NOTE: If students finish early before a rotation, two challenge problems (in Task Boxes K and L) can be given for students to work on while waiting. Students should only work on challenge problems if their partner is also done with the two required tasks for that rotation.

3. After given amount of time (2-5 minutes), when most students have finished with the two problems, the students with one color of the template are designated as "sitters" and the others are the "walkers." Students who are moving to a new partner might do so following a pre-determined rotation pattern or students can have free choice to find a new partner.

4. Once the students have a new partner, they need to compare answers from the previous two tasks. If they agree, they sign their initials in the circle connecting the two task boxes. If students disagree, they work to determine who is correct prior to signing. Once students compare, the teacher should have posted what the next two tasks are and they work with this partner to complete the next two tasks.

5. Repeat process for up to 5 rotations.

NOTE: After a rotation, if there is a lot of discrepancy in student answers as they compare with their new partner, the teacher can call a FREEZE. With a FREEZE, all students should put their writing utensils down then ask for a partner set where they got different answers on a specific task. These students hand over their templates for the class to examine (under a document camera) and provide feedback on. Having classroom sentence starters for the FREEZE component can be helpful in guiding the conversation such as "I like… I wonder… Your next step could be…"

Name _____ Date _____

PARTNER MATH

A

B

C

D

E

F

G

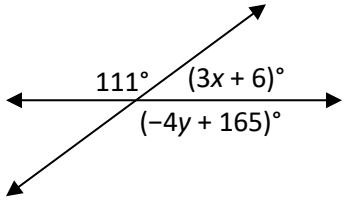
H

I

J

K **CHALLENGE**

Find the values of x and y.



L **CHALLENGE**

∠FUM and ∠MUP are adjacent angles. ∠FUP is a right angle. The measure of ∠FUM is four times the measure of ∠MUP. What is the measure of ∠FUM?