

Time	What	Why & Other Stuff	Materials Needed
12:40–12:45	<ul style="list-style-type: none"> • Warm-up: What is mathematics? 	<ul style="list-style-type: none"> • Develop shared understanding of what it means to do mathematics • Multiple Ability Orientation: • Multiple Abilities: connecting words and symbols, connecting pieces of equations to words, concept of variable, explaining thinking, justifying responses, making sense of a problem situation, comparing two situations, representing ideas with pictures, questioning your team, persisting with difficult ideas 	<ul style="list-style-type: none"> • Warm-up Task Sheet
12:45–1:05 (or less? or more?)	<ul style="list-style-type: none"> • Groupwork Jeopardy 	<ul style="list-style-type: none"> • Remind / retrain students on groupwork roles • Outline my expectations for completing the today's task 	<ul style="list-style-type: none"> • Groupwork Jeopardy PPT
1:20–2:08	<p>Shuffle Quiz with embedded Participation Quiz (Colin?)</p> <p>Task Distribution: To Timbuktu By Equation</p> <ul style="list-style-type: none"> • Resource Monitors: Make sure that your group members are ready for a quick start: pencils, desks cleared, sitting where you can see everyone's work. • Facilitators: Come up and get the task card for your group. Make sure that the group reads the task card out loud—it's important to understand the words and directions before moving on. There's a lot to do, so get your group off to a quick start and help them focus. <p>Getting Started</p> <ul style="list-style-type: none"> • Monitor Students as they take up the task. Watch for participation, and call team captains for a huddle (or just remind them) that they are supposed to encourage participation: "We need to work on listening to each member of the team" "We haven't heard from you. What do you think?" If peer doesn't respond, encourage them. • Assign Competence. Assign Competence. Assign Competence. 	<ul style="list-style-type: none"> • Reinforce norms for participation; Reinforce group interdependence and autonomy; Reinforce use of roles • What do I want students to learn? <p>Mathematical Goals:</p> <ol style="list-style-type: none"> 1. Understanding of variable 2. Making meaning of algebraic expressions 3. Substitution in algebraic expressions 4. Interpreting algebraic expressions using summary phrases, and in specific contexts 5. Developing meaningful algebraic expressions 6. Explaining and Justifying <p>Multiple Abilities: connecting words and symbols, connecting pieces of equations to words, concept of variable, explaining thinking, justifying responses, making sense of a problem situation, comparing two situations, representing ideas with pictures, questioning your team, persisting with difficult ideas.</p>	<ul style="list-style-type: none"> • Task Cards (one per student) • Progress Chart & Clipboard

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	<p>Engaging with the Task Once groups have made progress on question one (or if they end up struggling with the directions), call up the Recorder/Reporters for a huddle. Explain that we will do the Shuffle Quiz in pieces and that the group should call me over when every group member is ready with Q#1. Do they have questions about the shuffle quiz? If they are waiting on the teacher, then the group should move on.</p> <p>Call TCs for a huddle if I need another one. Call Fs for a huddle if I need another one.</p> <p>What should I see and hear if kids are engaging in the task?</p> <ul style="list-style-type: none"> • Reading / re-reading TC; pointing to TC • picking apart different parts of the expression • BECAUSE • Referencing information about their families • Comparing two situations • Making decisions about variable • Questioning: Why? How did you get that? <p>What am I going to do if they don't?</p> <ul style="list-style-type: none"> • Try to intervene using roles and content • Call a huddle • Intervene with a specific kid or group • Harsher interventions: Participation in a group is a privilege not a right... Work on task in isolation until student is ready to rejoin the group. <p>Details, Details... (if kids ask, or if I need to state it.)</p> <ul style="list-style-type: none"> • Each “shuffle quiz” question is worth 25 points, for a total of 100 points. • You may earn bonus points (or lose points) based on the “participation quiz.” Each “+” adds 2 points, and each “-” deducts 1 point. • Today’s norms for the “participation quiz” are: (1) Play your role; and (2) Support thinking with reasons. 	<ul style="list-style-type: none"> • How do I want them to learn it? <ul style="list-style-type: none"> - “To Timbuktu by Equation” Task with Shuffle & Participation Quiz • How will I be convinced that they have learned it? <ul style="list-style-type: none"> - student discourse on the task - exit tickets - shuffle quiz responses 	

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	<p>Assessment: Shuffle Quiz [Every group should get through Q#1 today. Perhaps more. Record progress on “Progress Chart.”]</p> <p>When the RM calls me over, shuffle papers (2 in each hand) and have students call right/left. Use process of elimination to pick the paper.</p> <p>Press students to explain EVERY part of the equation: Profit, the 25C, the 8D (why is it subtracted?), the division by 2 (why?).</p> <p>If students aren't ready, summarize what they need to think about, and tell them to call me back when they're ready.</p>		
2:08–2:15	<p>Resource Monitors: Make sure your team helps you clean up your workspace (chairs, under tables, trash, etc).</p> <p>Recorder/Reporters: Make sure your group members put their task cards in their notebooks...</p> <p>Exit Ticket</p> <ul style="list-style-type: none"> • Answer the following questions on the back of your warm-up: <ol style="list-style-type: none"> 1. What did you learn today? 2. What questions do you have about today's lesson? 3. Did your group work well together today? Explain. 4. (Optional) Additional comments or questions. • Turn this in when you leave. 	<p>Reinforce use of roles as a management structure.</p> <p>Place responsibility on students.</p> <p>Assessment of what kids processed from the lesson</p>	Warm-up Task Cards

PROGRESS CHART

	Aces	Kings	Queens	Jacks	Nines
Q#1					
Q#2					
Q#3					
Q#4					