SETON HILL UNIVERSITY

Lesson Plan Template Abridged

(May be adapted based on instructor’s needs)

Pre-Planning

|  |  |  |
| --- | --- | --- |
| TOPIC | DETAILS | CK |
| Name | Stephanie Sholtis |  |
| Subject | Math |  |
| Grade Level | Fourth |  |
| Date/Duration | 2/5/15 15 minute lesson |  |
| Standards[/ anchors](http://www.portal.state.pa.us/portal/server.pt/community/state_assessment_system/20965/p/1329672)/competencies [PA/Common Core/Standards](http://www.pdesas.org/standard/views)(Plus any others as may be required)  | M04.A-T.1.1.4: Round multi-digit whole numbers (through 1,000,000) to any place.M04.A-T.1.1.3: Compare two multi-digit numbers through 1,000,000 based on meanings of the digits in each place, using >, =, and < symbols. |  |
| [Formative AND/OR Summative Assessment Evidence](http://www.pdesas.org/module/assessment/Search.aspx) | Formal Evaluation* Teacher will use rounding worksheet as an evaluation to determine if the students understand rounding as well as greater than and less than.

Informal Evaluation* Teacher will use discussion as well as the wimpy/strong activity to evaluate the children’s ability to determine weak and strong numbers.
 |  |
| [Objective](http://web.mnstate.edu/instrtech/SCmodules/LearningObjectives/LearningObjectives5.html)A-B-C-D[Bloom's Taxonomy](http://www.nwlink.com/~donclark/hrd/bloom.html)[Webb's Depth of Knowledge (DOK)](https://sites.google.com/a/bay.k12.fl.us/power-curriculum-test/webb-dok-resources) | * During the anticipatory set, all students will be able to identify the strong and weak numbers used in rounding multi digit whole numbers with 100% accuracy.
* During the activity, all students will work in groups of 2. The students will identify the numbers on the dice and recognize what numbers round up. This will be achieved with 90% accuracy.
 |  |

Step-by-Step Procedures

|  |  |  |
| --- | --- | --- |
| RATIONALE for the Learning Plan | DETAILS  | CK |
| Introduction | Activating Prior Knowledge* Teacher will write a number line on the board.
* Teacher will review the number line briefly with students.

Hook/Lead-In/Anticipatory Set* Teacher will ask the students what strong means to them.
* Teacher will ask students what wimpy means to them.
* Teacher will remind students that strong and wimpy can represent more then just people. Teacher will provide examples. (Strong: trees, chains, and bridges. Wimpy: wilted flowers, small animals, and babies)
* Teacher will write a “T” chart on the board and write “wimpy” on the left and “strong” on the right
* Teacher will show the students the strong and wimpy pictures and hang them on the board away from the “T” chart.
* Teacher will select one student to sort the strong and wimpy cards correctly on the “T” chart but only have 20 seconds to do this.
* Teacher will set 20 seconds on the timer
* Teacher and student will discuss with the class why they sorted the cards they way they did.
* Teacher will have student go back to seat.
* Teacher will make a new “T” chart next to the original chart.
* Teacher will write “wimpy” on the left side of the “T” chart.
* Teacher will write “strong” on the right side of the “T” chart.
* Teacher will ask students if they knew that numbers could be strong and wimpy too?
* Teacher will select one student to sort what they think the strong and wimpy numbers are on the “T” chart.
* Teacher and student will review the chosen numbers.
* Teacher will explain that strong numbers are bossy and they tell the other numbers what to do when we round numbers, and the wimpy numbers just sit back and listen to whatever the strong number say to do.
* Teacher will have students choose a picture to represent “wimpy” for the wimpy numbers and a “strong” picture for the strong numbers.
* Teacher introduces rounding multi-digit whole numbers to students.
 |  |
| Explicit Instructions[Big Ideas](http://www.pdesas.org/module/sas/curriculumframework/)[Essential Questions](http://www.pdesas.org/module/sas/curriculumframework/) | Big Idea Statement* To increase to the next place value, you must multiply by 10.

Essential Questions * What is a strong number?
* What is a wimpy number?
* What does it mean to round?

Key Vocabulary* Rounding
* Strong Numbers
* Wimpy Numbers
* Greater Than
* Less Than
 |  |
| Lesson ProcedureMust include adaptations & accommodations for students with special needs[Accommodations, Modifications](http://www.osepideasthatwork.org/parentkit/school_accom_mods_eng.asp) | Pre-Assessment of Students* Teacher will ask students to identify strong and wimpy numbers from the numbers on the board.

Modeling of the Concept* Teacher will place worksheet on Elmo projector
* Teacher will roll the dice
* Teacher will write the numbers that come up under “partner A”
* Teacher will roll the dice
* Teacher will write the numbers that come up under “partner B”
* Teacher will round the numbers to the greatest 10 and write > or < sign in the circle
* Teacher will round to the greatest 100 and write > or < in the circle
* Teacher will keep example up on the screen for students to follow since this is a new concept.
* Teacher will have students remain in their seats since the desks are already groups in pairs. The student to the left will come to the front of the room to get the needed supplies (team worksheet and dice)

Guiding the Practice* Teacher will ask the students what strong means to them.
* Teacher will ask students what wimpy means to them.
* Teacher will remind students that strong and wimpy can represent more then just people. Teacher will provide examples. (Strong: trees, chains, and bridges. Wimpy: wilted flowers, small animals, and babies)
* Teacher will write a “T” chart on the board and write “wimpy” on the left and “strong” on the right
* Teacher will show the students the strong and wimpy pictures and hang them on the board away from the “T” chart.
* Teacher will select one student to sort the strong and wimpy cards correctly on the “T” chart but only have 20 seconds to do this.
* Teacher will set 20 seconds on the timer
* Teacher and student will discuss with the class why they sorted the cards they way they did.
* Teacher will have student go back to seat.
* Teacher will make a new “T” chart next to the original chart.
* Teacher will write “wimpy” on the left side of the “T” chart.
* Teacher will write “strong” on the right side of the “T” chart.
* Teacher will ask students if they knew that numbers could be strong and wimpy too?
* Teacher will select one student to sort what they think the strong and wimpy numbers are on the “T” chart.
* Teacher and student will review the chosen numbers.
* Teacher will explain that strong numbers are bossy and they tell the other numbers what to do when we round numbers, and the wimpy numbers just sit back and listen to whatever the strong number say to do.
* Teacher will have students choose a picture to represent “wimpy” for the wimpy numbers and a “strong” picture for the strong numbers.
* Teacher introduces rounding multi-digit whole numbers to students.
* Students will be given 15 minutes to complete the task.
* Students will remain at their desks in their groups of twos. Each team will work on the worksheet together.
* The student on the left will be “partner A” the student on the right will be “partner B”
* Each student will take turns filling out his or her individual information.
* Teacher will walk around the room checking on each group and observing conversation regarding rounding and greater than and less than.
* Teacher will observe conversation for terminology using wimpy and strong numbers to determine what numbers are being rounded.
* When time is up, partner B will bring the materials to the front of the room and return to the desk.

Providing the Independent Practice* Students will work with a partner on the rounding worksheet.
* The students will be given 3 dice.
* They must take turns rolling the dice and writing down the 3 numbers that come up.
* The students must round the numbers to the greatest 10 and 100.
* The students must determine on the worksheet if the numbers are greater then or less then after rounding.

Adaptations/Accommodations for Students with Special Needs* Dyslexia – student will be given extra processing time to think about the problem
* Paper would be colored instead of black and white
* Font on paper would be Arial instead of Times New Roman
* Student will work with a partner to help identify numbers
* Student will be given verbal directions
* Teacher will give the student a picture of board for the student on the iPad, or provide a paper of what would be on the board
* Colored dice for the worksheet
 |  |
| Materials (reading, technology, equipment, supplies, etc.) | * Rounding worksheet
* Dice (3 for each group)
* Pencils
* Dry erase markers
* Tape
* Strong cards
* Wimpy cards
* Timer
* Elmo (overhead projector)
 |  |
| Closure | Summary & Review of the Learning* As an exit slip students will write a “T” chart of strong and wimpy numbers at the end of the day.

Homework/Assignments* Practice rounding numbers at home with a parent
 |  |
| Other—(This area is to be determined by instructor OR student *as needed*) |  |  |
| Supervising teacher comments and signature  |  |  |
| Teacher Self-reflection* What worked?
* What would you change?
 |  |  |