** LESSON PLAN**

**Candidate’s name:** Terri Wilkinson

| Grade/Class/Subject: | grade 5, math  | School: | Suwilaawks |
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| Date: | Nov 25 2024 | Allotted Time: | 45 min |
| Topic/Title: | Reviewing two-digit subtraction with regrouping using base 10 (lesson 5) |

1. **LESSON ORIENTATION**

**Key resources:** [Instructional Design Map](https://www.dropbox.com/s/g7l0nd7jah1o927/InstructionalDesignMap.pdf?dl=0)

| *Briefly, describe purpose of lesson, and anything else to note about the context of lesson, students, or class, e.g. emergent learning needs being met at this time, elements of focus or emphasis, special occasions or school events.* |
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| The object of this lesson is to develop fluency, demonstrate problem solving steps, and assess understanding of the students. |

1. **CORE COMPETENCIES**

**Key resources:** <https://curriculum.gov.bc.ca/competencies>

| **Core /Sub-Core Competencies** *(check all that apply):* | *Describe briefly how you intend to embed Core Competencies in your lesson, or the role that they have in your lesson.* |
| --- | --- |
| ☐x COMMUNICATION – Communicating☐ COMMUNICATION – Collaborating ☐x THINKING – Creative Thinking☐ THINKING – Critical Thinking☐x THINKING – Reflective Thinking☐x PERSONAL AND SOCIAL – Personal Awareness and Responsibility☐ x PERSONAL AND SOCIAL – Positive Personal and Cultural Identity ☐ PERSONAL AND SOCIAL – Social Awareness and Responsibility | Communication* students will show mathematical thinking by showing their work through the steps and using drawings of manipulatives
* collaborating to work as a team during the game to solve the math equations

Thinking * students will solve the subtraction problems using logical reasoning and the base 10 method
* students will get to choose the best strategy for them and explore different ways to solve (drawing, manipulatives, verbal explanation)

Personal* students will show how they can best solve the problems
* students will also have to demonstrate the process they use
* students will support their team members during game
* students will stay respectful and positive with team members
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1. **INDIGENOUS WORLDVIEWS AND PERSPECTIVES**

**Key resources:** First Peoples Principles of Learning (FPPL); [Aboriginal Worldviews and Perspectives in the Classroom](https://www2.gov.bc.ca/assets/gov/education/administration/kindergarten-to-grade-12/indigenous-education/awp_moving_forward.pdf)

| **FPPL to be included in this lesson** *(check all that apply):* | *How will you embed Indigenous worldviews, perspectives, or FPPL in the lesson?* |
| --- | --- |
| *X* Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors. ☐X Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place). ☐ Learning involves recognizing the consequences of one's actions.☐X Learning involves generational roles and responsibilities.☐ Learning recognizes the role of Indigenous knowledge.☐X Learning is embedded in memory, history, and story.☐ Learning involves patience and time. ☐X Learning requires exploration of one's identity.☐ Learning involves recognizing that some knowledge is sacred and only shared with permission and/or in certain situations. | * The game emphasizes learning through experience and relationships. students learn collaboratively within their teams
* students are responsible to show their work, and participate with their teammates
* the lesson provides lost of practice for students to refine their subtraction skills, and develop them over time and practice
* students will explore their role in the group and develop personal responsibility with the activity
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1. **BIG IDEAS**

**Key resources:** <https://curriculum.gov.bc.ca/> (choose course under Curriculum, match lesson to one or more Big Ideas)

| *What are students expected to understand? How is this lesson connected to Big Idea/s or an essential question?* |
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| Computational [fluency](https://curriculum.gov.bc.ca/curriculum/mathematics/5/core) and flexibility with numbers extend to operations with larger (multi-digit) numbers. |

1. **LEARNING STANDARDS/INTENTIONS**

**Key resources:** <https://curriculum.gov.bc.ca/> (choose course under Curriculum)

| **Curricular Competencies:***What are students expected to do?*  | **Content:***What are students expected to learn?* |
| --- | --- |
| Use reasoning to explore and make connectionsDevelop [mental math strategies](https://curriculum.gov.bc.ca/curriculum/mathematics/5/core) and abilities to make sense of quantitiesDevelop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving[Communicate](https://curriculum.gov.bc.ca/curriculum/mathematics/5/core) mathematical thinking in many ways | addition and subtraction of [whole numbers](https://curriculum.gov.bc.ca/curriculum/mathematics/5/core) to 1 000 000[addition and subtraction facts to 20](https://curriculum.gov.bc.ca/curriculum/mathematics/5/core) (extending computational fluency) |

1. **ASSESSMENT PLAN**

**Key resources:** [Instructional Design Map](https://www.dropbox.com/s/g7l0nd7jah1o927/InstructionalDesignMap.pdf?dl=0) and<https://curriculum.gov.bc.ca/classroom-assessment>

| *How will students demonstrate their learning or achieve the learning intentions? How will they know if they are proficient? How will the evidence be collected, documented and shared? Will you use* ***observation****s, have targeted* ***conversations****, or collect* ***products****? Mention any opportunities for feedback, self-assessment, peer assessment and teacher assessment. What tools, structures, or rubrics will you use to assess student learning (e.g. Performance Standard Quick Scale)? Will the assessments be* ***formative****,* ***summative****, or both?* |
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| Formative* teacher will observe students during game play of trash-kat-ball to monitor how they solve the subtraction problems
* teacher will check for accuracy in the regrouping with the use of drawings or manipulatives
* teacher will provide feedback during the game
* teacher will observe the students in the group for participation

Summative* the individual exit tickets at the end of the lesson will give teacher an idea of where the students are at
* teacher will use the exit ticket to assess each students ability to apply base 10 method and regrouping
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1. **DESIGN CONSIDERATIONS**

**Key resources:** [Instructional Design Map](https://www.dropbox.com/s/g7l0nd7jah1o927/InstructionalDesignMap.pdf?dl=0)

| *Make brief notes to indicate how the lesson will meet needs of your students for: differentiation, especially for known exceptionalities, learning differences or barriers, and language abilities; inclusion of diverse needs, interests, cultural safety and relevance; higher order thinking; motivations and specific adaptations or modifications for identified students or behavioural challenges. Mention any other design notes of importance, e.g. cross-curricular connections, organization or management strategies you plan to use, extensions for students that need or want a challenge.* |
| --- |
| differentiation* will provide subtraction problems that don't involve regrouping
* students can choose to use the draw it method or using manipulatives
* teacher will groups students to balance skill level

adaptations* can use visual aids
* can use pre written templates
* provide noise-canceling headphones

behavioral challenges* teacher will set clear expectations
* teacher can assign roles within each teams
* can use a timer for transitions between rounds
 |
| **Required preparation:** *Mention briefly the resources, material, or technology you need to have ready, or special tasks to do before the lesson starts, e.g. rearrange desks, book a room or equipment.* |
| * whiteboard and markers
* base 10 blocks or visual aids
* pre-made subtraction questions
* trash can or small basket (“hoop”)
* ball
* scoring chart
 |

1. **LESSON OUTLINE**

| **Instructional Steps** | **Student Does/Teacher Does** *(learning activities to target learning intentions)* | **Pacing** |
| --- | --- | --- |
| **OPENING:***e.g. greeting students, sharing intentions, look back at what was learned, look ahead to what will be learning, use of a hook, motivator, or other introduction to engage students and activate thinking and prior knowledge* | **Introduction** “today we are going to review two digit subtraction using the base 10 method, I will teach you a new game called trash-kat-ball we can play and have a short quiz”**Whole class review**teacher * review the base 10 with regrouping to whole class
* write a subtraction question on the board (73-58)
* solve it step-by-step using base 10 method drawing it
* the do the equation using base 10 method using the manipulatives
* next put up another equations (86-49) for the whole class to review
* solve it together step-by-step using the base 10 method using regrouping with either drawing it or the manipulatives
* invite students to volunteer to solve the problem up at the board
 | 10 min |
| **BODY:*** *Best order of activities to maximize learning -- each task moves students towards learning intentions*
* *Students are interacting with new ideas, actively constructing knowledge and understanding, and given opportunities to practice, apply, or share learning, ask questions and get feedback*
* *Teacher uses learning resources and strategic opportunities for guided practice, direct instruction, and/or modelling*
* *Can include: transitions, sample questions, student choices, assessment notes (formative or otherwise), and other applications of design considerations*
 | **Trash-kat-ball game****set up*** divide students into teams (3-5)
* provide each team with manipulatives, whiteboard or paper for drawing base 10 representations
* place the “hoop” at front of room, have tape on the floor for scoring lines

**how to play*** display a subtraction question. all teams solve the same questions simultaneously
* teams must show their work (drawings, base 10 steps, or manipulatives to qualify for points
* will not except the stacking method

**scoring*** teams that answer correctly with showing their work earn a chance to shoot for points
* there is a 3 point line, a 2 point line, and 1 point for missed basket but correct answer
* teams with incorrect answers do not get to shoot

62-41 = 21 81-57 = 2454-32 = 22 64-28 - 3670-45 = 25 93-78 = 1590-67 = 23 65-32 = 3362-47 = 15 70-45 = 2572-46 = 26 90-58 = 32rotate through questions and shooting until time runs out | 25 min |
| **CLOSING:*** *Closure tasks or plans to gather, solidify, deepen or reflect on the learning*
* *review or summary if applicable*
* *anticipate what’s next in learning*
* *“housekeeping” items (e.g. due dates, next day requirements*
 | **Quiz****Exit ticket*** each student will complete one subtraction question individually and show their work
* collect each exit ticket for assessment
 | 10 min |

1. **REFLECTION** *(anticipate if possible)*

| * *Did any reflection in learning occur, e.g. that shifted the lesson in progress?*
* *What went well in the lesson (reflection on learning)?*
* *What would you revise if you taught the lesson again?*
* *How do the lesson and learners inform you about necessary next steps?*
* *Comment on any ways you modeled and acted within the Professional Standards of BC Educators and BCTF Code of Ethics?*
* *If this lesson is being observed, do you have a specific observation focus in mind?*
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| The students really enjoyed this lesson. It was a great review game for the previous lesson I have taught to prepare them for the exit ticket quiz. If I were to teach this again I would practice being more in proximity of the students when students were picking team names, working on the problems and trying to work together. I had stayed at the front of the room to be able to see the boards when students held them up, but I think it would have gone better if I was moving around the room more, to help students stay on track and focused. |

**Previous lessons**

 **Lesson 1 - Introduction of two digit subtraction using base 10 with regrouping**

* **draw it method**

**Lesson 2 - More practice with two digit subtraction using base 10 with regrouping**

* **draw it method**

**Lesson 3 - Reteaching two digit subtraction using base 10 with regrouping**

* **using manipulative method**

**Lesson 4 - Review of 2 digit subtraction using base 10 with regrouping**

* **student choose of using the draw it or manipulative method**