

WEST CHESTER UNIVERSITY LESSON PLAN TEMPLATE	
<p>Lesson Day</p>	<p>Common Denominator</p> <p>Friday</p> <p>9/13/2019</p>
<p>How will this lesson support the learning goal?</p> <p>(1c: Setting Instructional Outcomes)</p>	<p>The students will review and classify the various ways and steps to find a common denominator of unlike fractions.</p>
<p>PA Standards and Other Appropriate Professional Standards</p> <p>(1c: Setting Instructional Outcomes)</p> <p>http://www.pdesas.org/Standard/view or https://www.pdesas.org/Page?pageId=1 <u>1</u></p> <p><i>List the Pennsylvania Standard(s) relevant for this lesson</i></p>	<p>5.NF.A.1</p> <p>Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{(ad + bc)}{bd}$.)</p> <p>https://achievethecore.org/coherence-map/5/23/224/224</p> <p>Standard - CC.2.1.5. C.1</p> <p>Use the understanding of equivalency to add and subtract fractions.</p>

<p>ISTE (Technology) Standards (IF APPROPRIATE)</p> <p>(1c: Setting Instructional Outcomes)</p> <p>www.iste.org / ISTE Standards for Educators</p> <p><i>When addressing this section, you should include the standard number and the sub-component (e.g., 3a, 4a-c, etc.). Also, explain how the unit or lesson explicitly incorporates at least one standard (standard 3-7 only). Describe where in the learning plan there will be evidence that the standard selected will be integrated into the learning experience.</i></p>	<p>Digital Citizen: Students recognize the rights, responsibilities, and opportunities for living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.</p> <p>2b. Students engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.</p>

<p style="text-align: center;">Objective(s)</p> <p style="text-align: center;">(1c: Setting Instructional Outcomes)</p> <p><i>Taking into consideration the learning goal, what is the objective(s) of this lesson that will support the progress toward the learning goal?</i></p> <p><i>The statement should be directly observable (use verbs that can be measured).</i></p>	<ol style="list-style-type: none">1. When given two or more fractions with different denominators, the student will be able to accurately find a common denominator for the fraction.2. I can work independently and with my peers to determine a common denominator for multiple fractions.
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Academic Language

(1a: Demonstrating Knowledge of Content and Pedagogy)

What language will students be expected to utilize by the end of the lesson? Consider Language function and language demands (see Lesson Plan User Guide).

What key terms are essential?

What key terms are essential to develop and extend students' academic language?

What opportunities will you provide for students to practice the new language and develop fluency, both written and oral?

1. Multiples: a number that can be divided by another number without a remainder.
2. Common Denominator: a shared multiple of the denominators of several fractions.
3. Least common multiple: smallest common multiple of two or more numbers
4. Equivalent fractions: fractions with different numerators and denominators that represent the same value or proportion of the whole.
5. Simplifying fraction: reduce fraction to its smallest term
6. Fraction: Part of a whole

<p style="text-align: center;">Materials/Resources</p> <p>(1d: Demonstrating Knowledge of Resources)</p> <p><i>What texts, digital resources, & materials will be used in this lesson? How do the materials align with the learning objectives/outcomes? If appropriate, what educational technology will be used to support the learning outcomes of this lesson? How do the resources support the learning objectives?</i></p> <p style="text-align: center;"><i>Cite publications and any web resources.</i></p>	<ol style="list-style-type: none">1. Coherence map https://achievethecore.org/coherence-map/5/23/224/2242. Student activity book pg. 273. Kahoot Game https://create.kahoot.it/details/d583e57d-80aa-496e-8aa3-1fabd89bd0324. Dominoes5. Chrome books6. Smart book7. White board8. Sticky notes
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Anticipatory Set

(1a: Demonstrating Knowledge of Content and Pedagogy)

5 minutes

How will you set the purpose and help students learn why today's lesson is important to them as learners?

How will you pique the interest or curiosity regarding the lesson topic?

How will you build on students' prior knowledge?

How will you introduce and explain the strategy/concept or skill?

Provide detailed steps

1. The teacher will put a warm up on the white board for students to complete.
2. Warm up: List all the multiples for the numbers 2, 3 and 9.

3. Possible answers to the warm up:

2- 2,4,6,8,10,12,14,18,20

3- 3,6,9,12,15,18,21,24,27,30

9- 9,18,27,36,45,54,63,72,81,90

4. "We will be using our knowledge of multiples to help us find common denominators for multiple fractions."

Instructional Activities

(1a: Demonstrating Knowledge of Content and Pedagogy;

1e: Designing Coherent Instruction)

Exploration (Model): How will students explore the new concepts? How will you model or provide explicit instruction?

Guided Practice: How will you provide support to students as they apply the new concept? How will you allow them to practice (with teacher support)?

Independent practice: How will students review and solidify these concepts to be able to use this new knowledge? How will you monitor and provide feedback?

Provide detailed steps.

1. The teacher will begin instruction by writing the two fractions $\frac{1}{2}$ and $\frac{1}{3}$.
2. "I would like you to find the common denominator for the fractions on the board."
3. "Keep in mind your multiples for the numbers in the denominator."
4. "We talked about common denominators in the beginning of the week, today is a review for our test we have next week."
5. "We will practice our turn and talk with the person sitting next to you. If you aren't confident about the way to do talk and turn, look at the steps that's hanging up."
6. "You may begin your turn and talk on the problem on the board. You have 1 minute."
7. The class will come back together, and the students will share what they discussed with their partner.
8. After each student share, the teacher will allow another student to intervene with accountable talk. Examples: "I agree or disagree because...", "I wonder...", or "Why do you think...?"
9. The teacher will allow a student to come up to the smartboard to solve the problem and the rest of the class will guide the student.
10. "I notice you guys wrote this fraction as an answer. Why do you think this is the answer to the problem?"
11. The teacher and the class will discuss the answer written.
12. "A method that can be used to find the common denominator is to multiply all

the numbers in the denominator. This will be beneficial to those who may have difficulty remembering their multiples.”

13. “I would like you to find the common denominator for $\frac{1}{2}$ and $\frac{1}{4}$ in your math notebook.

14. The teacher will walk around making sure students are engaged and on task.

15. The teacher will complete the problem with the assistance of the students.

16. “I have a question. Why do you think it’s important to know the common denominator for many fractions?”

17. “Let us turn and talk to the person across from you.”

18. The teacher will circulate the room, listening to students’ conversation.

19. “It’s important for us to know the common denominators for multiple fractions because it will help us add and subtract fractions with different denominators.”

20. “We will be doing rotations. A group of people will be working on computers, a group will be doing independent work, a group will be doing an enrichment activity, and another group will be with me.”

Rotations Groups:

- Enrichment: Make equivalent fractions using Dominoes. Refer to pg. 9 multiplication chart to help you.

- Teacher small group:
ESOL students and students
struggling with content.

- Computer: abcya.com;
sheppardsoftware.com

- Independent: pg. 27; can
work with a partner if stuck!

21. Teacher will give students a minute
warning when it's time to rotate.

22. "Please rotate to your groups silently
and safety."

Closure

(1e: Designing Coherent Instruction)

___ minutes

How will students share or show what they have learned in this lesson?

How will you restate the teaching point and clarify key concepts?

How will you provide opportunities to extend ideas and check for understanding?

How will this lesson leads to the next lesson?

1. The students will participate in a game on kahoot.
2. Teacher will ask students to write the problem $\frac{1}{2} + \frac{1}{3}$ and the answer on the sticky note on their desk with their name on it.
3. “Remember to prepare yourself for your test that you will be taking on Fraction. I am loving the progress you are making in learning fractions, give yourself a brain kiss (students blow a kiss to their hand and tap their head gently).”
4. If there is time, the teacher will show students a visual of $\frac{1}{2} + \frac{1}{3}$.

Differentiation

(1e: Designing Coherent Instruction)

What differentiated support will you provide for students whose academic development is below or above the current grade level?

What specific differentiation of content, process, products, and/or learning environment do you plan to employ to meet the needs of all your students?

How does your lesson support student differences regarding linguistic, academic, and cultural diversity?

How will your lesson actively build upon the resources that linguistically and culturally diverse students bring to the experience?

How will your lesson will be supportive for all students, including English Language Learners, and build upon the linguistic, cultural, and experiential resources that they bring to their learning?

How will your lesson be designed to promote creative and critical thinking and inventiveness?

1. Mr. Benson will be reviewing multiples with the students prior to my lesson.
2. Ms. Menoken will be pulling small groups of students and helping them understand common denominators.
3. Instruction is differentiated during rotations using manipulatives, like dominoes.
4. Technology is being used during the lesson.
5. ESOL/ELL students will receive extra support, as well as the students with an IEP

<p style="text-align: center;">Accommodations</p> <p style="text-align: center;">(1e: Designing Coherent Instruction)</p> <p><i>What classroom accommodations do you plan to employ to increase curriculum access for students identified with special education needs or 504?</i></p> <p><i>Describe how these accommodations align with the current Individualized Education Plan (IEP) for each student as applicable (avoid using actual names of students).</i></p>	<p>Accommodations will be for the students who are ELL and ESOL, as well for a student that is a selective mute and a student with a learning disability that requires an IEP.</p> <ol style="list-style-type: none">1. Spanish speaking students may sit together to help each other.2. The student who is selective mute seats in the front, closer to the teacher.

<p style="text-align: center;">Modifications</p> <p style="text-align: center;">(1e: Designing Coherent Instruction)</p> <p><i>What curricular modifications and/or changes in performance standards, if any, do you plan to employ to facilitate the participation of students identified with special education needs?</i></p>	<p>Modifications will be for the students who are ELL and ESOL, as well for a student that is a selective mute and a student with a learning disability that requires an IEP.</p> <ol style="list-style-type: none"> 1. Students may complete work with a partner or a group. 2. Students don't have to complete the entire activities but will just need to attempt some of them. 3. Answers to questions can be written down and not given orally. 4. Students may use tools like the multiplication charts to assist them.
<p style="text-align: center;">Assessment (Formal or Informal).</p> <p style="text-align: center;">(1f: Assessing Student Learning)</p> <p><i>How will you and the students assess where the learning objectives, listed above, were met?</i></p> <p><i>Each formal or informal assessment should describe how it is aligned to the above objective(s).</i></p>	<ol style="list-style-type: none"> 1. Hw: Student activity book pg. 27 2. Kahoot game 3. Classroom discussions (Turn & Talk; Accountable Talk) 4. Rotation activities (Pg. 27, ABCYA fraction games, and dominoes activity) 5. Exit ticket: $\frac{1}{2} + \frac{1}{3} = ??$

<p style="text-align: center;">Reflection on Instruction</p> <p><i>What evidence did you collect to demonstrate that your students have met or are progressing towards the learning outcome?</i></p> <p><i>What changes or adjustments had to be made during the lesson (justify those changes) to ensure students make adequate progress in meeting the learning objective?</i></p> <p><i>What changes will have to be made to the next lesson for students to be on pace in meeting the overall goal of the Lesson or Unit?</i></p> <p><i>Taking good notes about each lesson will help as you develop a formal reflective narrative at the end of the SLO.</i></p>	<p style="text-align: center;">This section will be completed after instruction is delivered.</p>
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Things to work on:

- Asking individual students to ask questions if they don't understand, vulnerability
- Differentiate rotation activities based on levels
- SAFETY: POWER: FUN: FREEDOM: LOVE!!

