LESSON PLANS: ALBERTA

Grade 4: Shape and Space (Measurement) Reading and Using a 24-Hour Clock

50 MINS

powered by

Mathletics

General Outcome:

• Use direct and indirect measurement to solve problems.

Specific Outcomes:

• Read and record time, using digital and analog clocks, including 24-hour clocks.

Introduction to Lesson

Teacher Background:

Students should be familiar with reading and using a 12-hour clock prior to this lesson.

• Display on interactive whiteboard the word time. Have students write down all of their ideas about time on chart paper. They can draw pictures or write words and numbers to represent what time means to them.

Prompt students:

- How do we measure time?
- What types of time are there?
- When/Where do we use time?
- Discuss a variety of answers. Introduce 24-hour time and when we generally measure time using the 24-hour clock.

• Log in to the

Teacher Console > Demonstrations > Concept Search.

Type time into the **Search** bar. Display on the interactive whiteboard the 12-hour clock and review with students. Then click on the 24-hour clock and explain how to convert the time.

Ask students questions like,

- What type of activity would you do at 18:00?
- What types of activities would you not do at 23:00?
- What could be done between 9:00 and 13:00?
- How much time has elapsed?

ITEMS NEEDED

- ✓ Interactive whiteboard
- ✓ Mathletics teacher login
- Student handouts from eBooks
- Computers/tablets
- ✓ 12-hour and 24-hour clocks

C ASSESSMENTS

- ✓ Observations
- Collaborative/group work
- Collect and assess time wheel.

ACCOMMODATIONS/ MODIFICATIONS

- ✓ Allow students to make their own clocks with both 24-hour and 12-hour time intervals. Students can use this as a math manipulative.
- Encourage students to click on "Something Easier" and "Something Harder" within the Mathletics curriculum activities.

EXTENSION OF LEARNING

- Measure time in phys. ed and record with a stop watch. Students can then determine total elapsed time to complete an activity.
- ✓ Grades 4 and 5 time sections in Rainforest Maths for extra practice

LESSON PLANS: ALBERTA Grade 4: Shape and Space (Measurement) Reading and Using a 24-Hour Clock

powered by

Mathletics

The Lesson



eBook: 24-Hour Time Dominoes Game

- Have students work in partners or play this game as a class.
- Print off the 24-hour dominoes game cards by logging in to your **Teacher Console > eBooks > Year 5 > Measuring Time**.
- Print page 8, "24-hour time dominoes game".
- One student or the teacher can be the caller.
- The other partner, or the class will write down 6 times.
- They must be o'clock or half past time, no other intervals.
- The caller or teacher then shuffles the cards and calls out the times.
- The first person to cross out all 6 times wins!
- You could call the times out in 12-hour clock times and students would need to convert the time to 24-hour times.

Collaborative Group Work

• Group 1—Live Math

Students should try Level 5/6 of Live Mathletics on their own accounts or on a classroom computer under teacher account. One student types while the other group members shout out the answers. These levels include time conversion.

• Group 2-Time Activities

Students should work on curriculum activities. Suggested activities in the Alberta Grade 4 course: What is the Time?, 24-Hour Time, Five Minute Times, Time Mentals.

• Group 3—eBook Handouts

o Option 1:

Students work together on Year 5 eBook: **Time > Measuring Time > page 5 > Question 6.** Printed or on interactive whiteboard.

o Option 2:

Students who still need some additional practice with 12-Hour Clocks can use the **Year 4 eBook**: **Time > Telling Time section** or **Time > Measuring Time section**.

After the lesson

Think, Pair, Share

- Have students reflect on their learning of time with another partner. Give students a few minutes to think, pair up with another partner, and share their learning.
- Prompt question: How did you measure time today? What were your challenges with a 24-hour clock?







