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| **21st Century Lesson Cycle Template** |
| **Grade: 4 Subject: Math** **Unit: Measurement: Time – 24 hour clock** |
| **Learning Target:** Students will tell time on a 24-hour clock and identify times when a 24-hour is more appropriate. |
| **Curriculum Outcomes**:M01.03 – Express time orally and numerically from a 24 – hour analog clockM01.05 – Express time orally and numerically from a 24-hour digital clock |
| **Screencast Support:** [Telling Time the 24-hour clock](https://www.youtube.com/watch?v=EapsfSfqeWA)  |
| **Resources/AT Tips:** [Screencast 24-hour clock](https://www.youtube.com/watch?v=EapsfSfqeWA) [Analog interactive whiteboard clock](http://www.teacherled.com/resources/clockspin/clockspinload.html) Practice sheet Clock for kids app – 24hour |
| **Lesson Procedure** | **21st Century Skills** |
| **I do:** * Activate prior knowledge by asking where can you find out what time it is? Review time and vocabulary
* Put the Analog Whiteboard clock up. It only shows 12 hours, there are 24 hours in a day. Begin to write the numbers 13-24 around the outside of the clock. This is a 24 hour clock.
* Discuss where you might see a 24 hour clock and why people may use one.
* From midnight to noon the hours are 0-12. From 1 to midnight the hours are 13-24.
* When we use the 24 hour clock we use 4 digits always – give examples.
* Watch [Time 24-Hour](https://www.youtube.com/watch?v=EapsfSfqeWA) screencast
 |  Find, validate remember, understand  collaborate, communicate analyze, synthesizecritical thinking evaluate, leverage create, publish citizenship |
| **We do:*** Together as a class write make a chart paper that has correspong times with a.m, p.m and 24-hour time
* Have students use clock for kids app on the iPads and practice 24-hour time. They can collaborate with their tablemates.
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| **You do:** * Extra practice sheet (see below)
* Mini assessment (see below)
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| **We share:**Bring class back together. Tell the time in 24 hour notation. Have them convert a few times on the interactive clock. |   |
| **Differentiation** |
| **Adaptations:** Have struggling students watch the screencast [Time 24 hour clock](https://www.youtube.com/watch?v=EapsfSfqeWA). Using clock for kids app watch the learn tutorial on 24 our clocks. | **Enrichment:** Continue to practice 24 hour time. Use Math Makes Sense 4 text book page 144 questions 1-8 |
| **Notes:**  |
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### Practice Sheet

### The 24-Hour Clock

1. Find pairs of times that are the same.
2:40 p.m. 12:40 a.m. 13:40 14:40 00:40 1:40 p.m.

2. Write each time using a.m. or p.m.

a) 23:40 b) 06:48 c) 00:35 d) 04:04

e) 07:24 f) 11:08 g) 21:15 h) 17:26

3. Write each time using a 24-hour clock.

a) 2:45 p.m. b) 12:06 a.m. c) 11:08 p.m. d) 8:15 a.m.

e) 10:26 p.m. f) 6:15 a.m. g) 4:05 p.m. h) 9:45 p.m.

Mini Assessment

A bus leaves Liverpool at 11:50 a.m. and arrives in Truro 3 hours and 25 minutes later. What time does the bus arrive in Truro? Show the time in as many different ways as you can. (Think about all the things we have done in our time unit, look back in your notebook and textbook.)