<table>
<thead>
<tr>
<th>Lesson Title</th>
<th>Lesson 2 – Age of Rivers</th>
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<tbody>
<tr>
<td>Time</td>
<td>1 - 50 min class period</td>
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</table>
| Resources            | ● Age of Rivers Notes PowerPoint  
                      | ● White boards/dry erase markers OR large paper/markers |
| Objective            | SWBAT discuss how a river changes over time. |
| Standard             | HS-ESS2-5. Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes. |

**Plan**

**Introduction (10 min)**
- Review River Anatomy vocabulary from Lesson 1 – Quizlet Live, Kahoot, Gimkit, bingo, etc.

**Notes (15 min)**
- Present the Age of Rivers Notes.
- Have students take their own notes or create guided notes for students to complete.

**Activity (15 min)**
- Students will work in pairs or triads to draw each of the 3 ages of rivers – young, mature, and old age.
- Students can use whiteboard markers on the desks/white boards, markers and butcher paper, or a device.
- For each river (young, mature, and old age), students will label the age and describe the main characteristics of that age.
- Students should additionally label each rivers headwaters, meander, cutbank, point bar, and mouth.

**Closing (10 min)**
- Groups will share their work with a different group and describe their three rivers to them.

**Authors**
Amanda Oanes and Jill Wold – West Fargo Public Schools

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Age of Rivers

SWBAT discuss how a river changes over time.
Young Stream

- Steep gradient
- Very few tributaries
- Flows quickly – white water rapids, waterfalls
- Channels erode deeper rather than wider
- Example: Rivers in mountainous regions
Mature Stream

- Gradient is less steep
- Flows more slowly
- Fed by many tributaries
- More discharge than a youthful stream
- Channels erode wider rather than deeper
- Well developed flood plain
- Example: Mississippi River
Old-Age Stream

- River with a low gradient (1-2 ft/mile)
- Low erosive energy
- Very wide valley
- Flood plains with levees
- Lots of deposition of sediment
- Oxbows
- Example: Red River