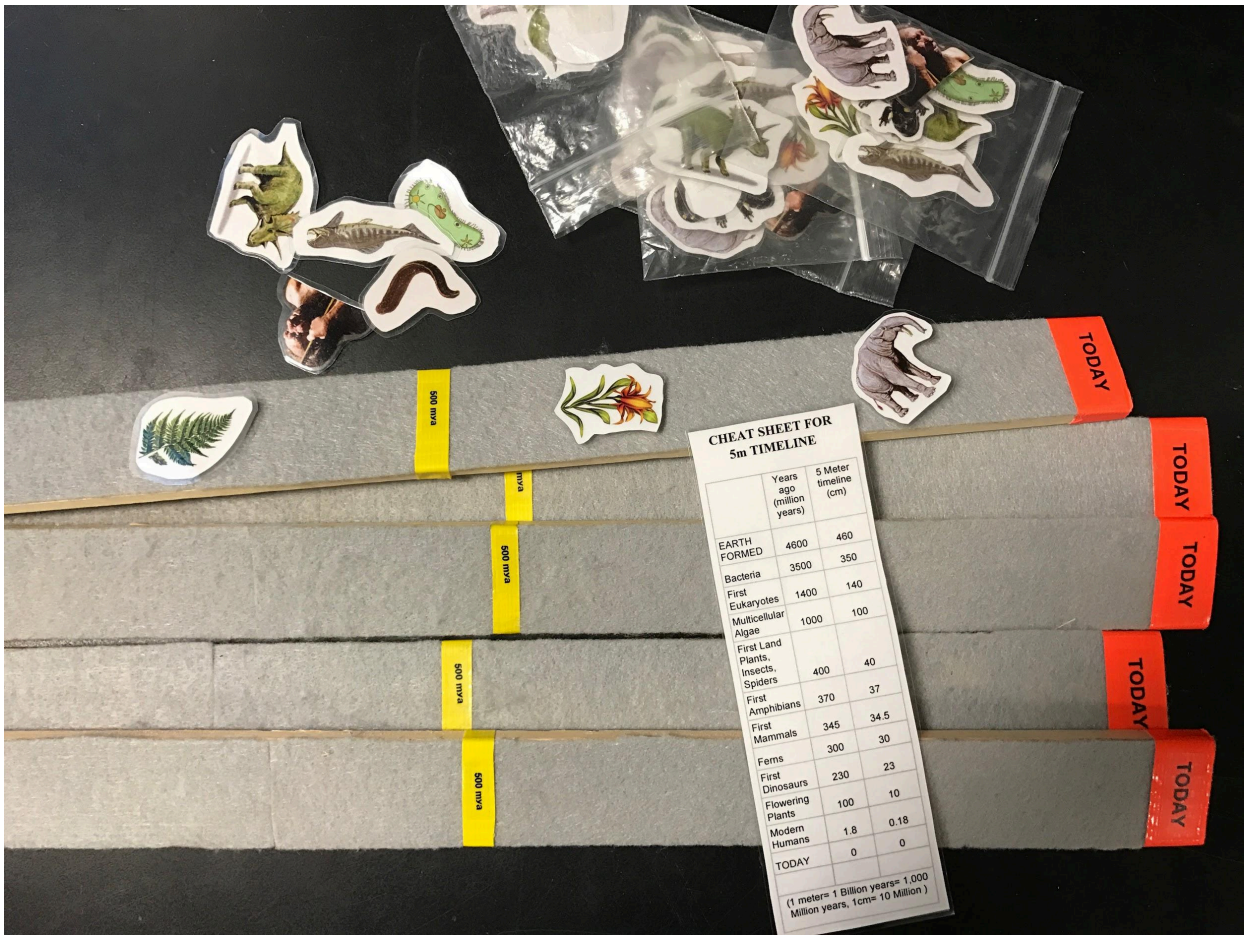
FELT RULER GEOLOGIC TIMELINE MODEL



Materials needed:

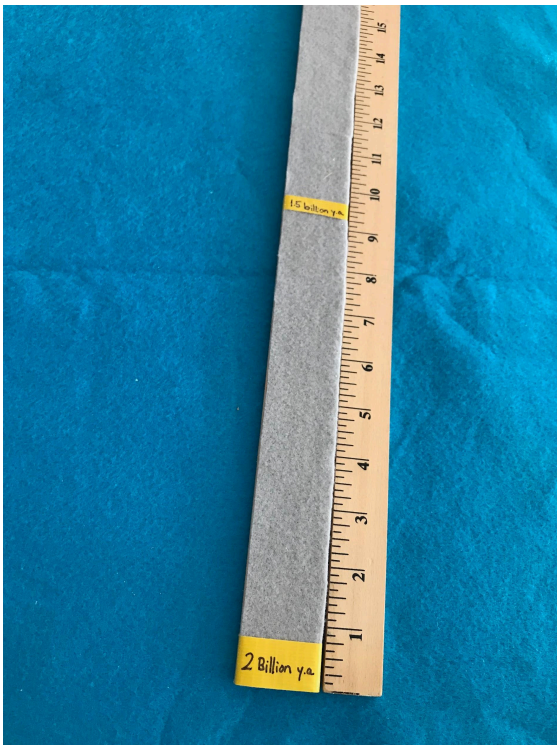
- Wooden yardsticks (one per group of students)
- Grey (or other color) felt sheets from any craft store
- Glue gun and glue sticks, or another type of glue that will stick felt to wood
- Laminated timeline icons.
- Thin yellow duct tape (or cut up)
- Thin orange duct tape’
- Sticky velcro for the back of the laminated icons (you will only need the “hooks” part)
- Teacher cheat-sheet for checking the students’ answers.

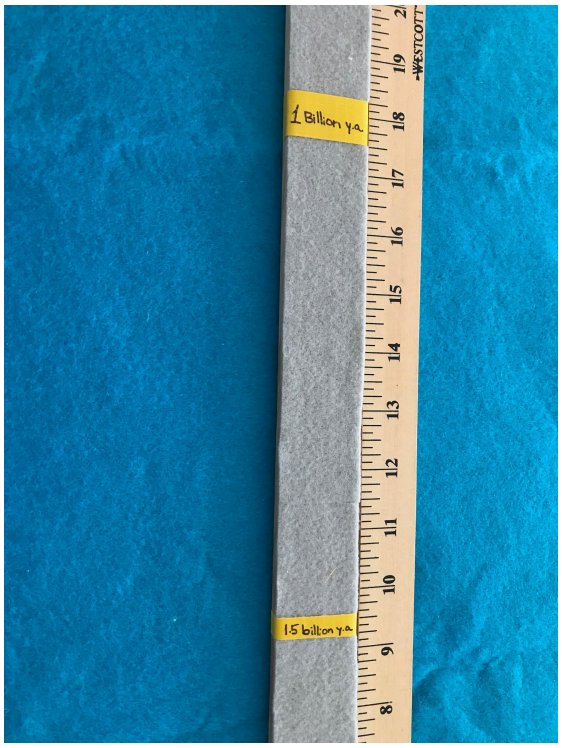
How to make the rulers:

➢ Cut up strips of felt the width of the ruler you are using.
➢ Stick the strips along the entire length of the ruler
➢ Label one end of the ruler “TODAY” with a brightly colored tape

- Label the other end of the ruler “2 billion y.a.”
- Add labels for:
    - 1.5 Billion ya
    - 1 Billion ya
    - 500 mya

  (see photos below for where to place them)





How to use the models:

- Give each group of students a ruler and a packet of velcro backed icons.
- Ask students in their groups, to place the organisms according to where they appeared on the geologic timescale.
- Once the group has brainstormed and come up with their answer, they hold up the rulers so the teacher can get an idea of their background knowledge.
- Each group then gets together with another group and they compare answers and discuss the rationale for the placement of the icons.
- When each group is happy with their final decision, they hold up the rulers again and the teacher has students look around the room to see how their group's answers compare to everyone else's.
- The teacher can then ask questions like:
    - "What organism did you place closest to Today?"
    - "Which organism did you think evolved first?"
    - "Why did your group put x before y?" etc.
- After the discussion, the teacher can give some more clues about the accurate placement, give all the answers, or proceed with a human-model of the geologic time scale without giving them all the answers until the end of that activity.