

## Remote 5E Activity Planning Chart

Use this activity guide to help you plan for your teaching. Complete for the E's that apply. Not all E's have to be included in each teaching activity.

<b>Grade Level and Subject:</b> 5th grade, Current Events in STEM	<b>Name of Teacher:</b>
<b>Length of Lesson:</b> 30 min	<b>Main Idea of the Lesson:</b> The Ethics of Astronomical Observatories - Astrocolonialism
<b>State or National Standards for Lesson: (TEKS) §112.16: (b) 3C, §113.16: (b) 23D</b>	
<b>Objective/s- Write objective/s in SWBAT form:</b> SWBAT <i>critique</i> the construction of astronomical observatories based on their impact to indigenous peoples.	

Lesson Stage	During this stage the teacher could be:	In my lesson or activity....	Resources needed	Approx. Time
ENGAGE	Generating curiosity about the topic Asking open ended questions Listening to students to find out what they already know Connect to lives/ interests of students	Students will draw a picture of a place that is special/sacred to them, e.g.. their house, school, park, church, etc.  The teachers will share what we drew beforehand as inspiration.  Students will then learn how big modern telescopes are.	Pen/pencil, journal  Slide deck	8 min (3 min writing in journal, 5 min discussing size of modern telescopes)
EXPLORE	Giving students time to work together to explore a topic/problem Asking questions about what they are doing Listening to student ideas Supporting students as needed (without giving answers)	Students will use Google Sky to visualize the awesome things modern telescopes can see and gain an understanding of why astronomers need huge modern telescopes.	Google Sky Science journal and pen/pencil	7 minutes (2 minutes of us showing them how to use Google Sky, 5 mins where they just explore and record in their journal)
EXPLAIN	Encouraging students to share their thoughts Highlighting important student ideas Asking questions that help students be specific in their explanations Providing new vocabulary or formal labels as needed	Return to special places and how the students would feel if we built a telescope on their special place. Define astrocolonialism. Then show students a 2.5 minute video of Mauna Kea protests against TMT construction  Finally, emphasize the key takeaways of the lesson.	Slide deck	10 min (3 min for definitions, 5 min for Mauna Kea example, 2 minutes reviewing key points of lesson)

ELABORATE	Asking the students to use the information in a new situation or test additional ideas Asking students to use the new vocabulary appropriately Real world connections	Students will write a short reflection expressing their feelings about this case study and offering any solutions they can brainstorm.	Padlet	5 minutes
EVALUATE (throughout)	Asking questions that provide insight into student progress Distributing questions evenly so that all students have the opportunity to share Observing students as they create products			