Co-Teaching Lesson Plan

Teacher 1: Harr	is Teache	er 2: Hobson	
Co-Teaching Approa	ich(es): Place an X or a ✓ on the line in fron <u>X</u> Parallel Teaching <u>X</u> Tea	m Teaching Station Teaching	
	One Teach, One Observe One	e Teach,One Assist X Alternative Teaching	
Subject: Earth Science Standard(s):	Topic/Lesson: Big Bang Theory/Cosmolog	Date:	
ES.13 The student will investigate and understand scientific concepts related to the origin and evolution of the universe. Key concepts include a) cosmology, including the Big Bang theory; and b) the origin and evolution of stars, star systems, and galaxies.			
Lesson Outcomes: Given background information and appropriate materials, students will model the expansion of the universe and describe the evidence that supports the Big Bang Theory to be evaluated by responses to short answer questions and a quiz.			
Materials Needed: 12-inch, round latex balloons (1 per 4-5 students), Permanent felt-tip marking pens, tape measures, highlighter, timer, positive attitude			
Vocabulary: Big Bang theory, blueshift, Doppler effect, redshift, electromagnetic spectrum, galaxy, cosmic background radiation, theory, wavelength, universe,			
Lesson Component	Teacher 1	Teacher 2	
Anticipatory Set: TSW answer questions based on Electromagnetic spectrum diagram Optional: show trailer for Big Bang theory tv show Co-Teaching Approach: Team teach and one teach/one assist	Circulate and assist students Assist students with barrier words; read questions to those who have comprehension challenges; 7 minutes time limit (use timer on board) TW explain the agenda for the day and required outcomes.	e answers once most students have answered questions about the electromagnetic spectrum (wavelength, frequency, etc.)	
Lesson: Activities/ Procedures	the Big Bang Theory, Doppler Effect, and Red/Blue Shift. Students will highlight the guided reading passage and draw a wave and a red shift		
Co-Teaching Approach: Parallel teaching	wave.		
Guided/Independent Practice	Students who struggle with concepts o independent work will be invited to work in a small group to complete assignment.		
Co-Teaching Approach: Alternative teaching			

Extension/Application: Big Bang Balloon lab	TSW work in small groups to model the Big Bang and Galaxy movement using a balloon. TSW collect evidence/data that supports the expansion of the universe.	Both teachers will circulate among lab groups reviewing procedures, asking probing questions, and redirecting students as needed.
Co-Teaching Approach: Team Teaching	TSW answer short response questions explaining Big Bang Theory in their own words.	TSW assign roles for students: supply manager, time keeper, data recorder, communicator (liaision), focuser
Closure Formative Assessment Strategies	TW read questions aloud as they are posted on the board.	TW collect Plickers answers.
Co-Teaching Approach: Team Teaching	TSW respond using Plickers cards.	
Homework		
Listen for sirens and train whistles to hear the Doppler Effect.		
Specially Designed Instruction and Accommodations, Modifications for Specific Students	If available use a read aloud assistive technology (Read & Write for Google or Voice Dream Reader) Manipulative: Non linguistic representation (Red Shift and the balloon model)	
Notes:		