

Learning Styles Workshop, led by Karrie Berglund
SEPA-WAC 2018

Ideas generated in small groups to target a particular planetarium topic using each of the seven learning styles

Topic: Seasons

Print: Share words, vocabulary in a handout

Aural: Repeat a sentence (“The reason for the seasons is the tilt of the earth”), use songs to communicate ideas

Visual: Length of the day (demonstrate at different locations); point out the north star and Earth’s tilt toward that star

Interactive: Group cards according to the season they represent; describe how you grouped them and why

Kinesthetic: Human model of the earth and sun

Haptic: Card sorting targets this learning style, too. Have students use a flashlight to shine it at different angles to represent sun over the course of a year.

Olfactory: Smells associated with particular seasons.

Topic: Black Holes

Print: Text and research (online or printed/hard copy); books or stories; write down a hypothesis; read before coming to planetarium

Aural: LIGO chirps; integrate music in the presentation; ideas shared vocally by presenter

Visual: Radio and x-ray images of BH/their effects; Gravity Well table/other physical models; computer simulation

Interactive: Fabric of space demo with table cloth/blanket and cell phones; spiralization of star motion

Kinesthetic: Assigning role to each student for BH “dancing” (see below); Standing in the planetarium: “Do you feel that gravity?”

Haptic: Dancing BH: Kids are the stars and spiral toward the center, other students do the wave to represent gravitational waves

Olfactory: Spaghettification—cook spaghetti and share that smell with the audience; “space has a smell” – burnt steak or gunpowder smells

Topic: Tides

Print: Project key words on the dome; introduce the main vocabulary of the story in print

Visual: Show (really good) diagrams and animations/movie

Aural: Stories about tides, song by Bette Midler and Blondie (“The Tide is High”)

Interactive: Dance of the earth and moon

Kinesthetic: Also dance of the earth and moon

Haptic: Braille rendition of the diagram; round and oval embroidery hoops

Olfactory: Sea smells—salt water and seaweed/scum

Topic: Rotation and Revolution

Print: Text books

Aural: Presenter explains concepts verbally

Visual: Physics Foundry show “This is our sky” or other planetarium shows

Kinesthetic: Penny moon (keep Lincoln’s nose pointed toward the middle of the quarter representing Earth)

Interactive: Orbit in pairs (model Earth-sun system)

Haptic: Also penny moon

Olfactory: Seasonal smells for revolution; night vs day smells, such as pollution