|  |  |  |  |
| --- | --- | --- | --- |
| Monday | Specific Goal | I Will | Students Will |
| Intro | **Homework check**  **Starter:** [species density equation practice](https://figures.boundless.com/19817/large/figure-45-01-01.png)  **Setup for activity**: 48R: It’s all living and connected | Check homework | Show homework, get setup. |
| Lesson Part 1 | **Activity:** **Biodiversity Application** Give scenarios, ask to apply genetic, ecosystem, and species diversity knowledge  **Transition:** Tell students to take notes on species and how it was done | Provide handouts, check in with students | Go through examples on worksheet, apply knowledge of biodiversity. |
| Lesson Part 2 | **Debrief:** [**Amazon jungle video**](https://www.youtube.com/watch?v=Eflt7otpeoQ)  Questions: What did you notice? What method did they use, how many species did they see? Is this the only location where they live? | Ask questions, show video, tell them we’ll watch twice, please take notes. | Watching, taking notes |
| Outro | **Homework:** How did the video show the importance of species diversity in the amazon? Turn in **Notebook due tomorrow, inputs 30- 45** | Help with homework, Make note of ialac | Do homework |

Reflections: Getting better at the transition from checking homework to doing the starter and beginning the activity. 8B went a little less smoothly, people seemed to get how to calculate the species density. Did not end up using the questions in the debrief. I started off using the video, then going into the worksheet activity. I made the questions relate to real life scenarios without going into too much I detail about new concepts. I wanted them to focus on describing changes to ecosystem, species, and genetics. I did a call and response to get students remember the parts of biodiversity. Seemed to help. 8A: most people were missing due to the bullying situation but we were still able to get the activity done. Will be interesting to see how the missing people get synced back up with the activity. I think I will have to set them aside so that they can catch up. People were really interested in the videos.

|  |  |  |  |
| --- | --- | --- | --- |
| Tuesday | Specific Goal | I Will | Students Will |
| Intro | **Homework check**, find partners  **Starter:** *What does it mean to be at the bottom of the food chain? How about the top?* [*What does this image show*](http://k8schoollessons.com/wp-content/uploads/2015/01/food-chain-1.png)*? Use video animals as examples.*  **Setup for activity:** read definitions on worksheet:  -*producers:* organisms that make their own food  -*Trophic pyramid:* a model that describes who eats whom  *Primary consumers:* these organism eat producers  Secondary consumers: eat primary consumers  *Top consumer/apex predator*: top of the tropic pyramid  Transition: Turn in notebooks | Put definitions up, Check homework, ask for volunteers, collect | Copy stuff down, show homework, do starter, take out worksheet, turn in notebook. |
| Lesson Part 1 | **Activity:** [**Trophic pyramid**](https://upload.wikimedia.org/wikipedia/commons/3/3a/Ecological_Pyramid.svg)  **-label parts of pyramid, sun, levels, energy transfer, energy lost as heat**  **Questions: What do you notice about the size of the pyramid levels?**  **Transition:** What are some examples of animals that fit in these categories? | Explain energy transfer, how only 10% of the original energy is conserved between levels. Populations decrease as you go up. | Draw connections, label parts, color in sections. |
| Lesson Part 2 | **Debrief:** Food Chain: a series of animals that depend on each other as a source of food  **Questions:** ask for examples of animals for trophic levels. | Give examples from different ecosystems.  [Example 1](https://dr282zn36sxxg.cloudfront.net/datastreams/f-d%3A12305aacd4687fae25fd7211524df19d1028c012233a18ac46587fe1%2BIMAGE_THUMB_POSTCARD%2BIMAGE_THUMB_POSTCARD.1)  [Example 2](http://www.ib.bioninja.com.au/_Media/food_chain_med.jpeg) | We do examples,  [they do examples with cards.](http://www.brainpop.com/new_common_images/files/96331/foodwebanimalcards.doc) |
| Outro | **Homework:** Come up your own with examples of food chains, do they only depend these animals? | Explain that they label as energy (sun) producer (name), primary (name), secondary (name), tertiary/apex (name).  Make note of ialac | Copy homework, start on homework |

I ended up extending this activity to be a couple days because of the positive response from students. I also liked the idea that students would be able to personalize their trophic pyramids. This was alos the lesson where I should not have let my student Isaac pass out the materials, I had expected him to just pass out the bunches of cards for the trophic pyramids but he messed it up. I do like the idea of reusing the same materials from different lesson so tht tey can see that the concepts are relevant and occur again and again.

|  |  |  |  |
| --- | --- | --- | --- |
| Wednesday | Specific Goal | I Will | Students Will |
| Intro | Homework check  **Starter:** [How many species exist in the world](http://www.scientificamerican.com/article/are-we-any-closer-to-knowing-how-many-species-there-are-on-earth/)? Do they all interact with each other?  **Setup for activity:** Take worksheet, write name on it, takes a random animal card. Stand in circle. | Check homework | Show homework, get setup. |
| Lesson Part 1 | **Activity:** [**food web:**](http://www.brainpop.com/new_common_images/files/96331/foodwebanimalcards.doc)stand in circle, move yarn between consumers/producers. Tell students to make observation about connections to other organisms.  **Transition**: Ask students to return to seats. Take out worksheet. | Explain that yarn represents energy, ask | Hold onto yarn, give answers, make observations |
| Lesson Part 2 | **Debrief:** Comparisons/foodweb homework  **Questions:** Compare food chain to food web. Compare food web in different ecosystems. | Tell students to draw at least 20 connections on web, animals can have more than one. Label with arrow to tell who is eating who. | Complete food web, ask questions |
| Outro | **Homework:** Finish Food web, how many food chains can you find in this food web? | Make note of ialac, see who has started. | Ask questions, start homework. |

The students really liked this activity, they got to be part of the modeI. I used yarn to make the connections between the trophic pyramids and the food chains. In the first pyramid, I made the mistake of trying to

|  |  |  |  |
| --- | --- | --- | --- |
| Thursday | Specific Goal | I Will | Students Will |
| Intro | Homework check  **Starter:** [What is going on in this image?](http://imgur.com/CXFOtcf)  (Will have this already downloaded).  Setup for activity: Worksheet: Fungus Among Us Copy definitions for: *Detritus: dead or decaying organic material,*  *Decomposers: organisms that break down organic material to release nutrients,*  *Scavengers: animals that eat dead animals.* | Check homework, setup starter | Show homework, copy definitions, read definitions a loud. |
| Lesson Part 1 | **Activity:** [Dead stuff: The secret ingredient in our food chain](https://www.youtube.com/watch?v=KI7u_pcfAQE)  **Transition:** Give worksheet on mushroom lifecycle. | Talk about how mushrooms have critical role in nature | Listen and ask questions. |
| Lesson Part 2 | **Debrief:** Brown Food Chain  Questions: What would happen if organisms didn’t decompose? Where does a mushroom fit on the food chain. | Give question, describe mushroom lifecycle | Label parts of mushroom life cycle. Create mushroom food chain |
| Outro | **Homework:** Do you think decomposer goes at the top of the food chain or bottom? Give examples of a food chain. | Make note of ialac | Do homework |

|  |  |  |  |
| --- | --- | --- | --- |
| Friday | Specific Goal | I Will | Students Will |
| Intro | Homework check  **Starter:** Show homework, collect notebooks. Help setup  Setup for activity:  *Copy homework:* Explain the food chain in this game. | ‘’’ | Show homework |
| Lesson Part 1 | **Activity:** Science Friday  **Transition:** Tell students that we will go play outside, but need good attention to setup first. | Facilitate, explain rules, and give role of sharks to two people. | Listen respond, play |
| Lesson Part 2 | **Sharks and minnows**  Questions: What happened over the course of the game? What was realistic/unrealistic, what animals could we add to make it more realistic. | Setup rules: boundaries, movement of seaweed | Participate, answer questions. |
| Outro | **Homework:** | Make note of ialac |  |