

Pipes Project

Nellis Elementary School

November 2010



Our classroom study project came from a Coal mines bringing in big trucks to put drain pipes in front of our school. The Children's interests started with the big work trucks which led to what are the big drain pipes for? Some children commented on what would flow threw the drains. We watched as the pipes were laid into the ground and connected to one another with a band.

We went back into the classroom and started asking the children questions about pipes and wrote down their answers. We webbed out the word "Pipes" and they started to tell me about different things that flow thru pipes, and how some pipes are used.

I sent home a letter to parents asking for their help to get our study flowing. I had a few parents to send items from different pipe fittings, nozzles, faucets, booster, hoses, pipe cutters, rain gutters, PVC pipes, metal, and plastic pipes and pumps.

We decided to go and investigate the inside and outside of the school and find out about all of the pipes around the school. We took the camera and clipboard with paper to write down our findings. One child was the reporter and the other children took pictures.

After the investigation we placed items throughout the classroom for the children to explore using different pipes. Listening and watching the children engage in conversations and working together putting pipes together gave me the opportunity to write down the questions they had about pipes.

Our study topic ended with a celebration of our learning with smoothie fruit drinks.



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Pipes Project: A Pictorial Diary



Pipes
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Length of project: One Month
Teacher: Cathy Loggins

Phase One	<u>Beginning the Project</u> Construction going on in front of the school. Large work trucks putting in drain pipes. The children started asking questions about all the work going on. Some were amazed about how big the drain pipes were and what was going to go through the pipes.
Phase Two	<u>Developing the Project</u> Investigation of different pipes and what they are used for. What goes through the pipes? Is water the only thing used for pipes? What we know about pipes and what do we want to find out.
Phase Three	<u>Concluding the Project</u> Finding out answers to our questions by using the internet and by walking around the school inside and out. Calling a plumber to visit and ask him questions about what we wanted to know about pipes.



Process Skills Used for Our Study Project on Pipes

- Observing and Explore-How do water pipes, gas pipes and electric pipes work? Why do we need them?
- Communicating and Representing- Writing down our findings when we took a walk around the school. Webbing class discussion in the different areas of the classroom.
- Physical Science- Shape and color- What different pipes are made of. Water freezing in the pipes and what happens. Pipes that float in water and sink in water.
- Earth and the Environment- Dirt and rocks hold the pipes in the ground. Body waste that we release goes into a pipe and down in the ground. Electric wire running through pipes to protect us from getting shocked.
- Social and Geography- Where to place the water pipes. Workers using maps to let them know where the pipes go.
- People and the Environment- We depend on fresh clean water to drink. Water goes through a plant to be cleaned before we can drink it. People depend on water for different things. Washing clothes, taking a bath, washing hands, flushing the toilet, but most of all we can't live without it.



Implementation of Pipes in Classroom Areas

- Sand and Water- Pipes in the water play for connecting and pouring water through. In the sand the children used small trucks for burring the pipes. Rain gutter pipes where used in the water play to learn about why we have them in our homes and school. We found this was a good time to sing the Itsy bitsy Spider song. The Children enjoyed watching a plastic spider get washed out.
- Blocks- Large work trucks for moving pipes and pretending to bury them in the ground. Different pipe for connecting them together. Hard hats, work gloves and road signs.
- Dramatic Play- Hard hats, work vest, water pipes, faucets, plastic hose, pipe wrenches, PVC plastic pipes. The Children took the classroom sink a part and pretended to work on the pipes and put in a new faucet.
- Art- Paper rolled up into pipes. The children connected them together to make a big long pipe to hand out in the school hallway for everyone to see our study topic. Blow straw painting and gluing straw on paper to represent pipes.
- Library- Books on plumbing
- Outdoors- Taking pictures of the construction going on. Large trucks for digging and loading pipes in.
- Music- Using a pipe cutter to cut small pieces of pipe to hang on a piece of fishing line to make a wind chime.