



nitty ★ gritty
★ super city ★

Working together

Description of photos

The children are using the crane to load the cargo from the docks onto the ship.

The other children are using wheelbarrows to transport bricks to the base of the structure, while the conveyor belt, pulleys and rope allow the bricks to be lifted more easily.

More information

Melbourne docks unload and load hundreds of tonnes of cargo everyday. Melbourne has the busiest container port in Australia.

Pulleys, conveyor belts, wheel barrows and ramps are all examples of simple machines. They are designed to make work easier.

Learning outcomes

In this activity, children will:

- use their senses to explore the world around them
- describe their activities and observations using both general and science-specific language
- participate in very simple investigations involving observation and measurement
- make predictions and test them
- make use of co-operative skills when working with others.

Pre-visit questions

1. What is happening in these pictures?
2. Why do the children use the wheelbarrows, ropes, pulleys or cranes to lift items?
3. Have you seen these machines used anywhere else?
4. If someone else wanted to use the same machine that you wanted to use, how could you work this out?

Post-visit questions

1. What types of cargo do you think a ship would carry?
2. Where do you think the cargo could be going?
3. Did you try to lift the cargo with your hands? What happened?
4. How many blocks could you carry in the wheelbarrow? Do you think you could carry that many if you didn't have a wheelbarrow?
5. What were some of the ways you carried the bricks from the floor up to the wall?
6. What was the easiest way to get the bricks from the floor up to the wall?

During your visit

- Discuss the cargo. What shape are the cargo containers? Why do you think they are using a ship to carry the cargo?
- Encourage children to share and work with others. Co-operative play is an important stage of children's development and learning.
- Count the bricks as they are placed in the wheelbarrow, the basket or on the conveyor belt.
- Ask children to predict how long they think it might take to unload all the cargo from the ship. Allow your child to complete the task. Discuss with them whether their prediction was correct.