



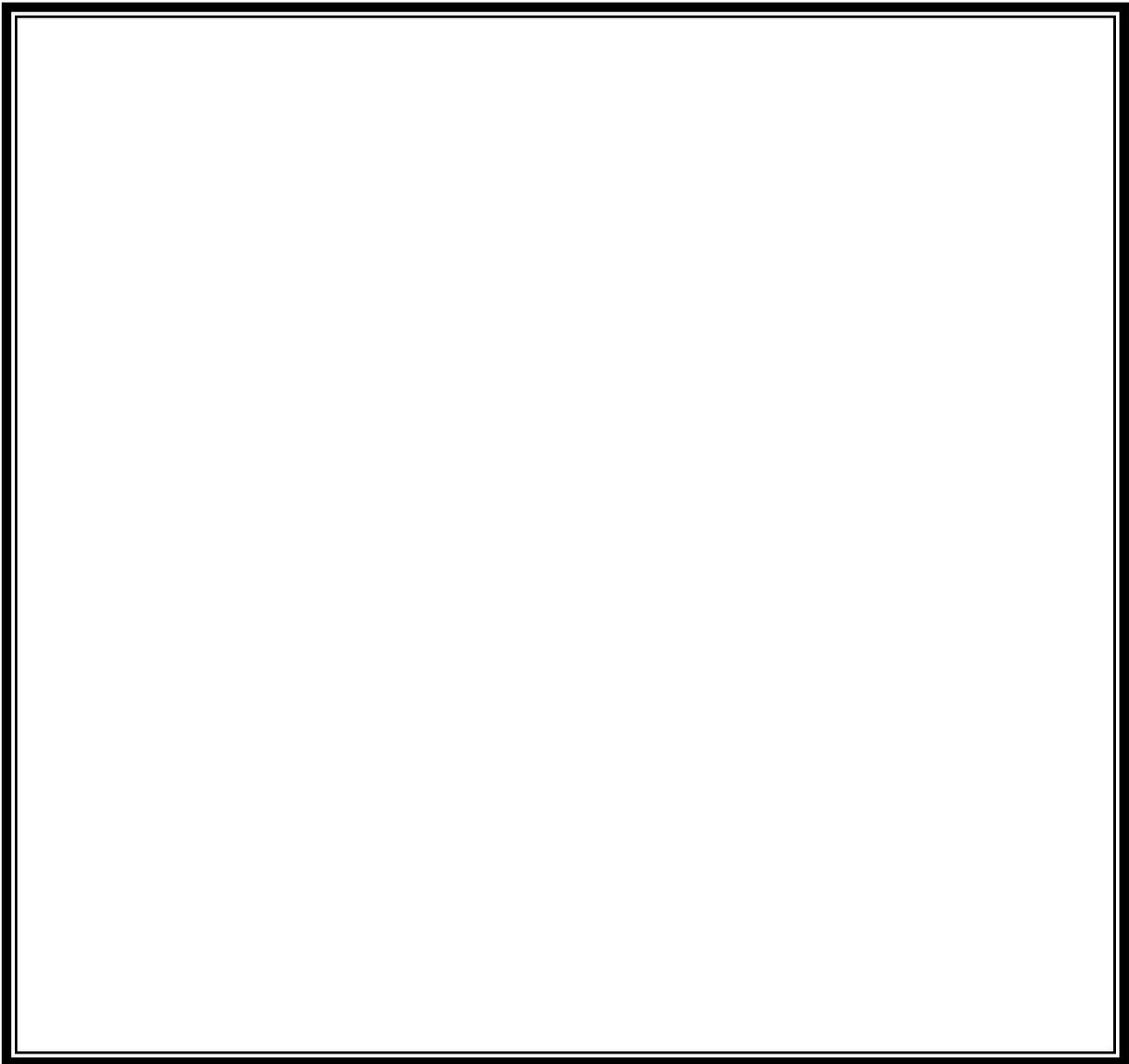
# Fairgrounds



## Investigating Fairgrounds

Look at the videos of fairgrounds and then sketch 1 of the rides that have rotating parts.

- ◆ Label all the types of motion.
- ◆ How does the ride turn?
- ◆ Draw the mechanism.
- ◆ Label all the parts.
- ◆ How are the components joined together?





# Fairgrounds



## Investigating Mechanisms

Examine, draw and label toys/appliances which have electric motors.

## Gearing down with pulleys

## Gearing up with spur gears

## Gearing down with spur gears



# Fairgrounds



## Design Criteria

I am going to design and make a rotating fairground ride. I want my ride to (list in order of importance):

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

Start to draw your ideas for your fairground ride here.



# Fairgrounds



Developing your ideas

Show how the electric motor will turn the ride.

Draw your electric circuit.

Draw the circuit diagram.



# Fairgrounds



What will you need to make your design?

List it here:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_

Wood Strip	Dowel rod	Wire
Battery holder	Connector blocks	Card
Card triangles	Pegs	Cotton reels
Junior hacksaw	Bench hook	Hand drill
Glue gun	Glue stick	Electric motor
Elastic bands	Plastic tubing	Microchips
	Corner guides	

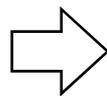


# Fairgrounds



## Planning

Draw a flow diagram to show the order in which you will make your ride:





# Fairgrounds



Design and make a fairground ride

When you have finished making your design draw it in this space.



# Fairgrounds



You said you wanted your design to be  
These things:  
(Copy your design criteria here)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

How well doe your fairground ride do each of these  
things?

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

What do you think about your design overall?



# Fairgrounds



Name : \_\_\_\_\_

Class : \_\_\_\_\_

