

# Trend Task: Mirrors

Approach: One to one

Year: 4 & 8

Focus: Investigating mirrors

Resources: Mirror (flexible plastic sheet with mirror surface), picture

## Questions / instructions:

### Give the student the mirror.

This is a mirror. You can bend it gently in different ways. Have a look at your face in it. Now bend the mirror towards you so that the mirror makes a U-shape. This is called a concave mirror.

1. How does the shape of your face change in the concave mirror?

is wider, bigger  
face/image is doubled when  
mirror is sharply curved

Now bend the mirror the other way so the edges are away from you. This is called a convex mirror.

2. How does the shape of your face change in the convex mirror?

is taller, skinner

Try bending the mirror other ways to see how it changes your face.

Give student picture.



% response  
2007 ('03)  
year 4 year 8

63 (68) 71 (76)

34 (33) 30 (30)

88 (89) 94 (94)

Have a careful look at the mirror in this shop.

3. Why do you think they used a convex mirror?

see more of shop/wider view  
to catch shoplifters/watch people in shop  
[not counted in total score]

% response  
2007 ('03)  
year 4 year 8

35 (49) 67 (80)

68 (57) 60 (56)

Total score:

4 8 (9) 14 (19)

3 29 (37) 44 (50)

2 43 (40) 33 (24)

1 17 (12) 8 (6)

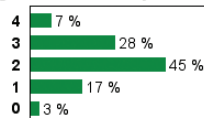
0 3 (2) 1 (1)

## Subgroup Analyses:

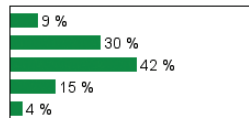
### Year 4

Score Range

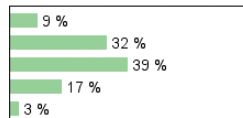
Boys



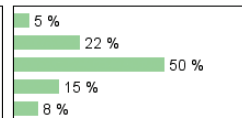
Girls



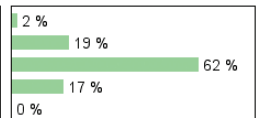
Pakeha



Māori



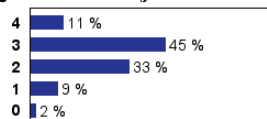
Pasifika



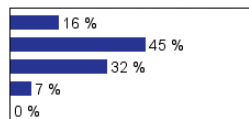
### Year 8

Score Range

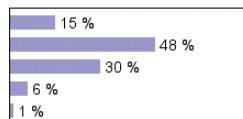
Boys



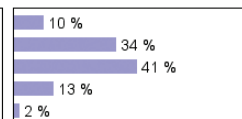
Girls



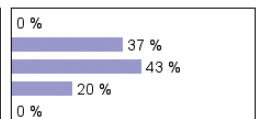
Pakeha



Māori



Pasifika



## Commentary:

There was a small decline in performance on this task between 2003 and 2007 at both year levels.