Wednesday, 11 June, 2008 Goodies Challenge

<u>G-05</u>

O you know why we can see motions when we watch the projection of a fast-rolling film which is made up of a series of individual pictures? It is because of the **persistence** of vision. Let's Dr. X teach you how to experiment it.

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## Question

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WHAT is persistence of vision?

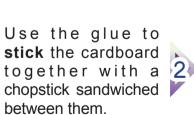
## Experiment

WHAT you need:

- Two pieces of cardboard
- A chopstick

• A bottle of glue • A pen







Roll the fan repeatedly with 3 high speed and find out what happens.

You can see the bird is trapped in the cage. Do you know why?



Draw a bird on a piece

of cardboard. Then, draw a bird cage on

another piece.



You can do the experiment with your family to see what persistence of vision is.

## Explanation

IMAGES stay in our brain for 0.6 seconds after we see them. Therefore, when we look at a series of

individual pictures at one time, they will be connected to become motions in our minds because the image of the previous picture stays in our mind while we are looking at the present one.

> It is interesting, isn't it?

> > repeatedy (adv) 重複地 previous (adj) 先前的

motion (n) 動作 individual (adj) 個別的

persistence (n) 持續 cardboard (n) 卡紙

chopstick (n) 筷子 stick (v) 黏貼