



Prize Winner

Computer Programming, Apps & Robotics Year R-2

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Name of Robot: Blinky the Teeth Cleaning Robot

Purpose of Robot: Teeth brushing

Potential applications:

- If you can't bend your hands or can't get a grip on a tooth brush
- If people can't open their mouths properly
- When kids can't be bothered doing their teeth

Type of robot used:

- Codey Rocky and a computer

How does Blinky the Teeth Cleaning Robot work:

- It works with a colour sensor to go only on white and to stop on red and turns and goes forward on the white.

Instructions:

1. Turn on Blinky using the power button on the left-hand side
2. Put it on the mouth
3. Then press C
4. This should go for 2 minutes
5. To turn it off press button A or turn off the power

Room for improvement:

- Blinky the Teeth Cleaning Robot does not have bristles → you could put bristles on it with suction cups
- Blinky is too big → It needs to be a mouth sized robot, about 1cm
- Blinky has to be safe → Its bristles have to be smooth. It can't have button batteries in case you swallow it – it should be powered by electricity. If Blinky had a rope, you could pull it out if it went down your airway
- Blinky could have an alarm to tell you that it is time to brush your teeth. This could help kids and adults if they forget to brush their teeth
- Blinky needs something to help it grip your teeth

Acknowledgements:

1. Mum helped me type my report
2. Dad helped me to solve problems with Blinky

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when button C is pressed
  play sound hello
  blink
  wait 5 seconds
  repeat until timer = 120 or button A is pressed
    if the color detected is white? then
      move forward at power 10%
    else
      if the color detected is red? then
        turn right 90 degrees until done
        move forward at power 10%
  stop moving
  reset timer
  blink
  stop all
```

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