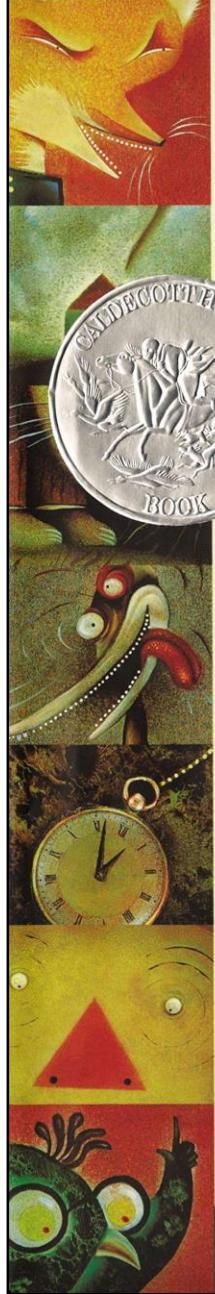


Loops

Repetition



THE STINKY CHEESE MAN *and other* FAIRLY STUPID TALES

*• Chicken Licken
• The Really Ugly Duckling
• The Tortoise and the Hair
• Cinderumpelstiltskin
• Little Red Running Shorts
• Jack's Bean Problem
and much, much, more!*

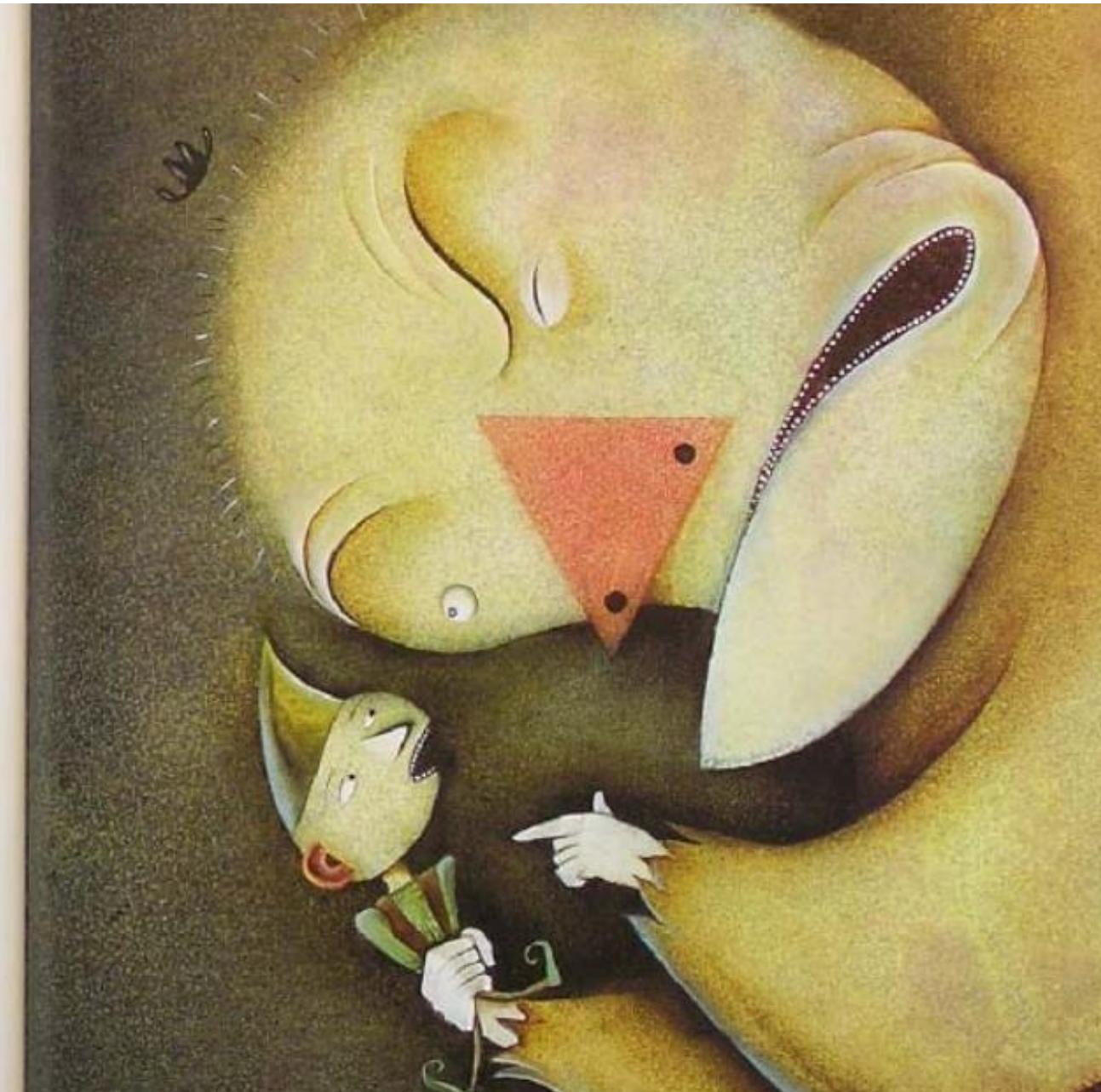
Your grade 3 teacher
may have read this
book to you.

If they didn't, I
recommend
that you look it
up some time.

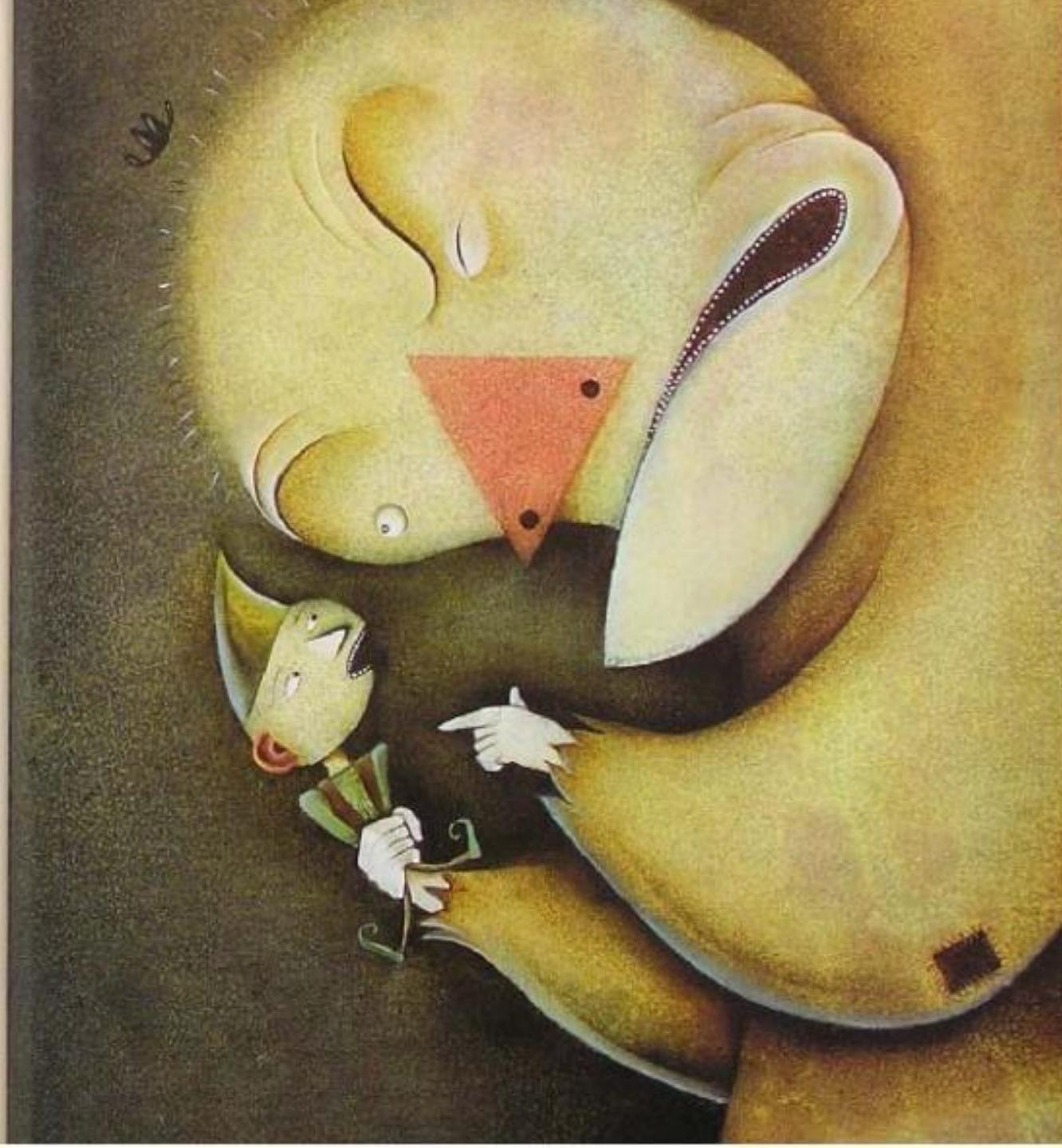
Once upon a time there was a Giant. The Giant squeezed Jack and said, "TELL ME A BETTER STORY OR I WILL GRIND YOUR BONES TO MAKE MY BREAD. AND WHEN YOUR STORY IS FINISHED, I WILL GRIND YOUR BONES TO MAKE MY BREAD ANYWAY! HO, HO, HO." The Giant laughed an ugly laugh.

Jack thought, "He'll kill me if I do. He'll kill me if I don't. There's only one way to get out of this." Jack cleared his throat, and then began his story.

Once upon a time there was a Giant. The Giant squeezed Jack and said, "TELL ME A BETTER STORY OR I WILL GRIND YOUR BONES TO MAKE MY BREAD. AND WHEN YOUR STORY IS FINISHED, I WILL GRIND YOUR BONES TO MAKE MY BREAD ANYWAY! HO, HO, HO." The Giant laughed an ugly laugh. Jack thought, "He'll kill me if I do. He'll kill me if I don't. There's only one way to get out of this." Jack cleared his throat, and then began his story. Once upon a time there was a Giant. The Giant squeezed Jack and said, "TELL ME A BETTER STORY OR I WILL GRIND YOUR BONES TO MAKE MY BREAD. AND WHEN YOUR STORY IS FINISHED, I WILL GRIND YOUR BONES TO MAKE MY BREAD ANYWAY! HO, HO, HO."



Once upon a time there was a Giant. The Giant squeezed Jack and said, "TELL ME A BETTER STORY OR I WILL GRIND YOUR BONES TO MAKE MY BREAD. AND WHEN YOUR STORY IS FINISHED, I WILL GRIND YOUR BONES TO MAKE MY BREAD ANYWAY! HO, HO, HO." The Giant laughed an ugly laugh. Jack thought, "He'll kill me if I do. He'll kill me if I don't. There's only one way to get out of this." Jack cleared his throat, and then began his story.



**“It was a dark and stormy night. The crew said to the captain,
“Captain, tell us a story.” The captain said to the crew,**

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The Green Pig's script (right):

```
when run
repeat (5 times)
  do [move forward v] (6 times)
```



when run

move forward

move forward

move forward

move forward

move forward

Without loops,
you need to
repeat the
same step
over and over.

With
loops,
the code
is more
elegant.

when run

repeat 5 times

do move forward



Count is the loop
stopping variable.

```
for (var count = 0; count < 5; count++) {  
    moveForward();  
}
```

A Scratch script consisting of three blocks: "when run", "repeat (5) [move forward]", and "end".

It starts at 0 and stops before it gets to 5.

```
for (var count = 0; count < 5; count++) {  
    moveForward();  
}
```

0 1 2 3 4

The Parts of a Loop



This is on the test and it is on the exam.

```
for (var count = 0; count < 5; count++) {  
    moveForward();  
}
```

The Parts of a Loop

A. Initialize
Loop
Stopping
Variable

A

```
for (var count = 0; count < 5; count++) {  
    moveForward();  
}
```

The Parts of a Loop

A. Initialize
Loop
Stopping
Variable

B. Test
Loop
Stopping
Condition

```
A  
for (var count = 0; count < 5; count++) {  
    moveForward();  
}
```

The Parts of a Loop

A. Initialize
Loop
Stopping
Variable

B. Test
Loop
Stopping
Condition

C. Steps
to
repeat

```
for (var count = 0; count < 5; count++) {  
    moveForward();  
}
```

A blue circle labeled 'A' is positioned above the initialization part of the code. A green circle labeled 'B' is positioned above the test condition. An orange circle labeled 'C' is positioned above the step function call.

The Parts of a Loop

A. Initialize
Loop
Stopping
Variable

B. Test
Loop
Stopping
Condition

C. Steps
to
repeat

D. Progress to
the Loop
Stopping
Condition

```
for (var count = 0; count < 5; count++) {  
    moveForward();  
}
```

The diagram illustrates the four parts of a loop mapped to specific code elements:

- A** (Blue circle) points to the `count = 0` part of the initialization.
- B** (Green circle) points to the `count < 5` part of the test condition.
- C** (Orange circle) points to the `moveForward()` part of the steps.
- D** (Red circle) points to the `count++` part of the progression.

The Parts of a Loop

A. Initialize
Loop
Stopping
Variable

B. Test
Loop
Stopping
Condition

C. Steps
to
repeat

D. Progress to
the Loop
Stopping
Condition

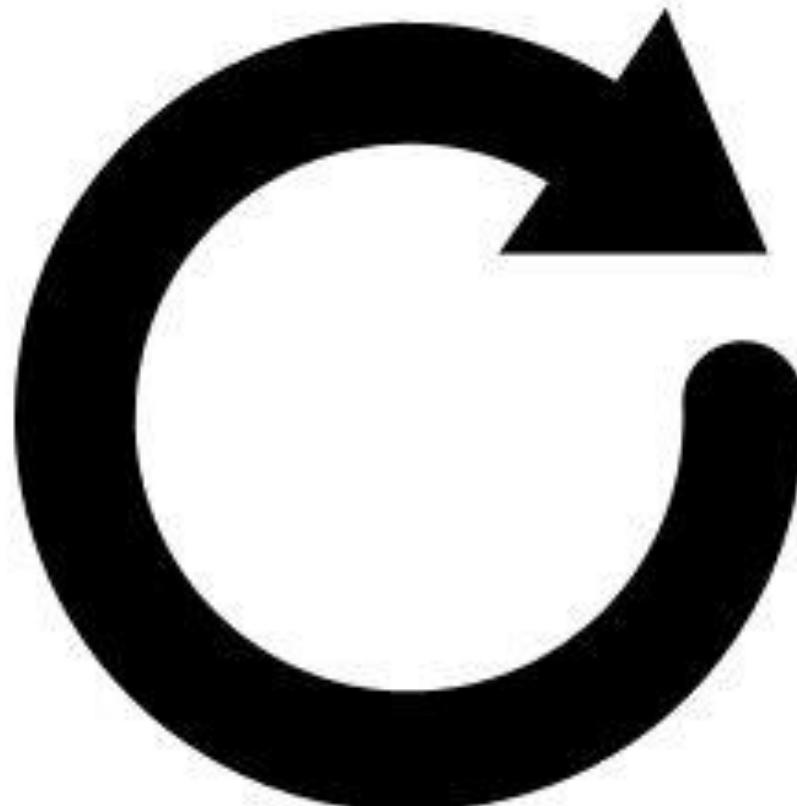
The diagram illustrates the four parts of a loop using colored circles A, B, C, and D, which are connected by arrows to specific parts of the provided code.

The code is:

```
for (var count = 0; count < 5; count++) {  
    moveForward();  
}
```

Annotations:

- A** (Blue circle) points to the initialization part: `var count = 0;`
- B** (Green circle) points to the test condition part: `count < 5;`
- C** (Orange circle) points to the step part: `moveForward();`
- D** (Red circle) points to the progression part: `count++`



LOOPS REPEAT
ACTIONS...
SO YOU DON'T HAVE TO