

## **Miss Miskell the Minibeast Maker(s)**

### In the Office:

This is Miss Miskell and she works for the well-known toy factory “Motion Toys”, who make mechanical toys for children. It was getting to the end of the long day, when her manager called her in to the office.

“Miss Miskell”, she announces, “I want this year’s special line of Christmas toys to be five Mechanical Minibeasts. I want the designs in my office by tomorrow morning”.

“But it’s half past five in the evening!”, complains Miss Miskell.

“Well you’d better get on with it, then”.

“Minibeasts”, sighs Miss Miskell as she tramps back to the factory floor, “How am I going to design five minibeast toys by tomorrow morning? Where do I begin? I don’t even know what they look like!” She slumps down at her desk starts to think.

‘Well there’s snails, they’re a bit slimy and have a pointy shell. And beetles, they have large pincers don’t they?’ She pulls out a piece of paper and begins to draw. The hours pass by and the night draws in. Finally, at half past eleven, Miss Miskell throws down her pencil.

“It’s no good, I can’t do this” she says aloud, “I’m trying to design a woodlouse, but I don’t know if it has 10 legs or 8, 2 antenna or 4, a long-thin body, or short fat one. And this beetle doesn’t look like a beetle. And this snail doesn’t look like a snail. I need to find out what these minibeasts really look like”. She puts her pencil down and gazes out of the window. ‘Maybe, just maybe I might be able to find some of these creatures lurking in the hedgerow over there. I’ll need my coat though, it’s cold out tonight!’

### By the Hedgerow:

A few minutes later and Miss Miskell is out by the hedgerow. She looks around quickly and then more carefully, but she cannot find any of the tiny creatures. She is just about to give up when she hears some very quite voices, coming from beneath the undergrowth.

“Who’s causing all this noise this time of night? We can’t hear ourselves think”, say the voices.

Miss Miskell looks around, but can’t see where the voices are coming from, so she crouches down to take a closer look.

“Who are you?” ask some snails, “in to our part of the hedgerow at this time of night?”

Miss Miskell can’t quite believe here eyes and ears because it’s not often you hear snails talk. But it had been a long day and she was very tired...

“Me? I’m Miss Miskell” she answers. “I’m a toy maker. You must be.... let me see....er.... snails?”

### Snails:

“That’s right”

“Look, I’m in a bit of a mess” continues Miss Miskell. “I’ve got to come up with the design for five minibeast toys by tomorrow morning. The thing is, can’t do it. Look, here’s my picture of a snail”.

“Hmmm”, go the snails “That doesn’t look like a snail at all. Here’s what a snail really looks like”. (Pick a drawing of a snail off the board).

“We have:

- a spiral shell
- a long thin body
- 2 long tentacles
- 2 short tentacles and
- a large sucker foot.

“And if you want to know something really special, we have teeth. They are here, on our tongues. Our rows of small, pointy teeth make us well suited to eating green plants and rotting vegetation. We simply scrape all the food into our mouths and swallow it down. Now, not many people know that”.

“No, I didn’t” says Miss Miskell.

“Nor do we have eyes there! Look carefully and you will see our eyes are on the end of our two tall tentacles – here. Having eyes here helps us to find our way around in the undergrowth. Our top two tentacles are for looking and the bottom two for smelling out something tasty to eat in the dark”.

“You’ve drawn another minibeast”, mentions one snail, “What’s this one?”

“It’s a beetle”, Miss Miskell tells them.

“It doesn’t look much like a beetle to us. Go and ask that Ground Beetle over there what he thinks”.

### Beetle

So, Miss Miskell makes her way over to the Beetle and shows him the sketch.

“Hmmm...”, goes the beetle, “That doesn’t look like a beetle at all! Now here’s what a beetle really looks like!” (He pulls a picture of a beetle off the bug).

“I have: six legs

two antenna

three body segments

three segments to each leg.

“I have long legs because I’m a Ground Beetle and hunt on the ground. My long legs make me well suited to hunting - they mean I can run fast to catch my dinner. But beetles can come in all different shapes and sizes - big ones, small ones, fat ones, thin ones, long legs, short legs, strong jaw, weak jaw. Did you know that there are more types of beetle in the world than any other creature?” He stops to look at Miss Miskell’s picture once more. “I don’t think any of us have those though. What are they?”

“Pincers” offers Miss Miskell.

“Well, we certainly don’t have any pincers – look”, and he waves his front legs for Miss Miskell to see.

“Oh”, says Miss Miskell, “I’d never noticed that before. What do you think of this design?” she asks as she holds up her portrait of a worm.

“Ha, ha”, laughs the beetle. “Maybe you’d better ask that worm over there!”

### Worm:

“Hey, worm”, calls Miss Miskell, “What do you think of this?”

“What is it?” asks the worm. “I can’t see”.

“It’s my design for a brand new worm toy. It looks a bit like a sausage, but I’m going to paint it pink, with bright red stripes and yellow eyes”.

“Wait a minute”, says the worm “did you say bright pink and bright red, with eyes?”

“Yes” says Miss Miskell.

“Hmmm....”, goes the worm, “That doesn’t look like a worm at all. Now here’s what a worm really looks like” (He pulls a picture of a worm off the bug).

“I have: a long slender body

a tiny mouth at my head

five hearts

no bones, but strong muscles, to help me move through the soil.

“I’m an earthworm so I have pale grey or pink skin. If I were multicoloured like you have described me, hedgehogs and birds would easily spot me. They would gobble me up

faster than you could say writhing wriggling worms! But what really makes me mad is you've given me eyes. Look closely and you will see, no earthworm ever has eyes". Miss Miskell leans in for a closer look. "So you haven't" she gasps, "I've never spotted that before!

"That's because we live underground, where it's always dark. There's no point us having eyes if we can't use them".

### Woodlouse:

"Hello, what's this?" asks a new voice from behind the worm. And a round, grey woodlouse crawls over from an old, rotten log.

"It's meant to be a design for a new worm toy", replies Miss Miskell, "but I think it needs a little work. I've done one for a woodlouse too. Do you want to take a look?" Miss Miskell holds her design for the woodlouse to see.

"Hmmm...", goes the woodlouse "That doesn't look like a woodlouse at all!. Now's here's what a woodlouse really looks like". He pulls a picture of a woodlouse off the bug.

"I have: 14 legs  
2 antenna.  
Hard plated back  
2 black eyes.

"My shell-like plates help protect me from hunters, but they are not waterproof, so don't stop me from drying out. I hide in wet places, like under logs or stones because I need to stay damp to stay alive. This is because I'm related to crabs and lobsters, creatures you usually find in the sea. I have breathing tubes, instead of lungs and if they dry out, I can't breathe". The woodlouse squints and takes a closer look at Miss Miskell's drawing "Why have you drawn me all smooth and round, I look like a ball with legs!"

"But you are smooth and round, aren't you" asks Miss Miskell

"Look carefully, can you see my separate plates along my back"

"Oh, yes now I see them they look a bit like the armour plates an Knight on horseback might wear. That will make an interesting feature for my woodlouse toy! Thank you!"

### Moth:

Just then Miss Miskell feels a something small and soft, fluttering near her face. She steps back to take a closer look.

"It's a moth", she says out loud. "Hey, moth. Could you have a look at my design for a new moth toy? I don't think it's right yet".

"Hmmm....", goes the moth "That doesn't look like a moth at all. Now here's what a moth really looks like" (She pulls a picture of a moth off the board).

"I have: six legs  
two antenna.  
a large hairy body  
four wings

"I see why your moth design is not right, you've drawn me with only two wings. Take a good look, how many wings can you see?"

"Four?" suggests Miss Miskell

"That's right, four wings and a large, hairy body. Our wings are usually brown or grey in colour, to try to blend into the background. I'm a winter moth, so I have brown, patterned wings to look like an autumn leaf. When I land on a leaf I move around until I have my wing pattern lined up with the pattern on the leaf. This helps me to hide from larger animals, such as birds that might want to eat me".

"Now that's useful to know. Thanks for your help, moth, I'll make a much better moth toy now".

“Mind you don’t go confusing me with a butterfly, making your toy”, continues the moth. “Some people seem to find it tricky to tell us apart. Just remember that butterflies always rest on leaves and branches with their wings pointing up and touching at the top. Moths rest with them spread out by their sides”.

“OK, I’ll try and remember”, mumbles Miss Miskell.

And that was it – five different minibeasts for five different toys. It was time to get back to the factory so Miss Miskell could jot down all the ideas that were buzzing around in her head.

The next morning at 9 o’clock, Miss Miskell marches in to the manager’s office with her five designs.

“These are wonderful, Miss Miskell” declares the manager, “they are all so different. Some have legs and some don’t, some are long and some are short, some are soft and some are hard - five completely different toys and each one as interesting as the other! Well done! How did you do it?”

“Well” says Miss Miskell, “I guess I just looked carefully at what was around me, really”.

And did you know that this Christmas was the best Christmas ever for Motion Toys. Everyone wanted one of Miss Miskell’s mechanical minibeast toys. And if ever she walked down the street, there was someone bound to call out: “There she is, that’s Miss Miskell, the minibeast maker!”