

## Stone Age activities

By Petra Breuer-Küppers

### Bows and arrows

Our first question to the children was ‘What did people eat during the Stone Age?’. The children came up with the idea of gathering fruit and berries. However, people would also have wanted to eat meat, so we asked the children where they might have found it. The children realised that Stone Age people would have had to hunt animals. But without guns, how did they do it? One answer was with bows and arrows.

The next question then was ‘How can we build bows and arrows ourselves?’. What material do we need and where can we find it? The children realised they would need wooden sticks, cord and knives.

To find the right sticks, we needed to test the materials. A small group of children thought about the physical characteristics the sticks had to have and made a list: length, dryness, flexibility and thickness. Then they tested the sticks for suitability and gave them to the hunters to build bows.

The next step was making the bows and arrows. Each child could build his or her own bow(s) and arrows.

After that, the children considered lots of ideas for making the arrows fly well:

- Making arrows with different lengths
- Making arrows with different thicknesses
- Placing feathers at the end of the arrows
- Shooting the arrows high into the air or directly at the target

We then did a trial shooting to test the ideas, and awarded a prize for the longest shot.

To compare how far each arrow travelled, the children initially used their own feet, pacing the distance. But they soon realised that that method was not very exact. After some thought, they came up with the idea of making a tape measure based on the length of one child’s foot.

### Collecting wood to make a fire

Another topic we considered was ‘Where did people live in the Stone Age?’. In houses, in tents, in caves? The children could build caves out of paper maché or plaster of Paris, or even construct a complete landscape.

We then considered what Stone Age people would have needed in their caves: a fire to keep warm and to cook soup or roast the meat they had shot. So how can we make fire and which is the best material? Where can we find the material?

First the children thought about what might burn well. Then they went with one of the adults into the nearby wood and collected lots of materials that they had thought of, e.g. grass, straw, fresh leaves, dry leaves, twigs and branches. Then we classified and named the different types of material.

Next, the children discussed the criteria for what makes a good fire. Does the material catch fire easily? Does it produce a good flame or just glow? Does it produce a lot of smoke?

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Supporting material for:

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Finally, we made a campfire using the materials that burned best: dry twigs and branches. If necessary, you can use firelighters to help start the fire.

We established some safety rules for the pupils:

- The children were not allowed to work or play with the fire without adult supervision.
- Using small twigs, we made a circle around the fire – the children were not allowed inside this circle.
- No child was allowed to take a burning stick away from the fire.
- When we left the meadow at the end of the day, the fire had to be extinguished.

## Building a latrine

People in the Stone Age also needed to go to the toilet. Where did they do it?

We asked the children to consider what they would need to build a primitive latrine. The children thought about it and made proposals: a hole in the ground and a screen to provide privacy. They decided to use branches and little sticks to build a screen. The advantage of a hole in the ground is that we could fill it with soil when we went home, covering up the waste.

One group of pupils gathered wooden sticks to build a screen. Other children dug a hole in the ground. We used a spade but you could also use stones or your hands to make the hole, although that would be harder and slower.

Next, the children used trial and error to find a good method for building a screen. We then took a more systematic and planned approach: first building a rough fence with large sticks, then propping it up with other sticks, and finally filling in gaps with leaves and moss.

There are, of course, alternatives – for example, you could use a tarpaulin as a screen. One year when building the latrine, we used a big branch so the children could sit on it as they would on a toilet seat. Or you could take a mobile toilet.

We told all our pupils to go to the toilet at school each day before we left for the meadow. During the day, no child was allowed to go to the latrine without first asking a teacher. Finally, we posed the question of how to show that the latrine was in use. The pupils decided to use a twig with a piece of leather attached as an indicator, placing it in full view when someone was using the latrine.

## Making soup

What did people eat in the Stone Age? Which plants were available? The children found the information before we left for the meadow, searching in books and on the Internet. They concluded that Stone Age people might have made a soup out of vegetables.

What vegetable could we use today to make such a soup? During a walk the previous day, we had seen lots of fields so we were able to discuss possible ingredients for a tasty soup.

The farmer had given us permission to take some potatoes and other vegetables from his fields, so a small group of children went and collected some. Some children mentioned that their parents take vegetables from the fields without asking, so we were able to have a discussion about ownership and theft. We thought about ownership in the Stone Age – was the situation different to today?

Next, we showed the collected vegetables to the children and named them. On a tray, we laid a sample of each plant (potatoes, onions, carrots, celery, leeks, beans and cauliflower) and the children labelled them. This formed part of the exhibition for the parents.

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The children then washed the rest of the vegetables and cut them into small pieces using small, sharp stones. This was difficult, giving the children an idea of how hard life was in the Stone Age. They then tried cutting the vegetables using knives and noted the difference.

The next step was to cook the soup. One group of children built a fire, after which we put the vegetables in a big pot with some water, and let the soup cook slowly. Then we all ate soup together around the fire.

While the soup was cooking, we played word games using vegetable names. We also played a game in which the children were blindfolded and had to guess which vegetable was which by its feel or smell.

## Baking bread

In the Stone Age, there was no agriculture so people had to eat what they could find. Perhaps they collected grass seeds? Wheat is a type of grass, so we allowed the children to taste raw grains of wheat. They were hard and not tasty.

One way to make wheat grains more palatable would be to cook them in water to make a type of porridge. Another answer that the children came up with was to bake bread. But how can we make the flour? The children suggested we could rub the wheat grains between two stones.

We took two pieces of marble (a large stone to put the wheat grains on and a small stone for the children to hold in their hands), because it does not produce much stone dust. Then the children milled the wheat. It was a slow process and required patience, so the children took turns.

The children could see that there was stone dust in the flour. We used this opportunity to talk about teeth: if this was how people produced flour in the Stone Age, the stone dust must have worn down their teeth. At this point, you could discuss health and sickness in the Stone Age.

To speed up the process, we brought a bag of wholemeal flour with us, which we had ground at school (you could use a coffee grinder for this). We then made a dough using flour, water, yeast, and a little bit each of salt and sugar, then placed the dough in a sunny place. People in the Stone Age didn't use yeast but it produces a better bread, so we talked about the action of yeast. To demonstrate it, you can put yeast, a small amount of sugar and some warm water in a bottle and put a balloon over the top. After a while, the balloon will inflate as the yeast ferments.

The next question the children addressed was how to bake the bread. Some of them wanted to bake the bread on hot stones; we tested it and made little chapattis. Another group of children wanted to put the dough on sticks and hold it over the fire. We tested this version too and found it better – although we needed to remove the bark from the sticks first, using a knife.

Each child was allowed to bake his or her own bread and eat it directly. Nearly all of the children found it very good and tasty.

When working with the fire, the rules were:

- The children had to be supervised by an adult at all times.
- Each child was allowed only one stick at a time.
- Using small twigs, we made a circle around the fire, and the children were not allowed inside this circle.
- Once they had baked their bread, the children should make room for other children to bake theirs.
- Once used, the sticks were placed in a heap to be burned later.

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## Making a salad

Finding, preparing and eating food were important during the Stone Age. What else could people eat? What about salad?

Very few of the children knew any salad ingredients except lettuce, tomatoes and cucumber, so we showed them photos of different edible herbs (e.g. daisies, dandelion, lemon balm, sorrel, and onions). We explained that you can also pick other herbs growing locally if you are sure they are edible.

Next, we named the herbs, which were mostly unfamiliar to the children, after which two small groups of children went away to gather these plants – under adult supervision. To help them identify the plants, they were allowed to take the photos with them.

After that, we classified the herbs that the children had collected. For the exhibition, we laid a sample of each herb on a tray and the children labelled them.

The children were allowed to smell and taste each of the herbs, once they had shown them to me to check they were edible. We also discussed poisonous plants in our environment.

Then the edible herbs were made into a salad together with some lettuce that we had bought. (The children were happier to eat a salad when they knew at least one of the ingredients.) As dressing, we used homemade walnut oil (made by pressing walnuts through a garlic press), vinegar, salt and pepper.

We then ate the salad all together, and played word games with herb names, as we had done with vegetable names.

## Making tea

What did people in the Stone Age drink? They would have drunk mostly water, but they might also have made herb teas, for example when they were ill.

What do we need to make herb tea? We opened tea bags of different types of tea to see what was inside, and the children could see that there were pieces of plant. Which kinds of herbs are suitable for making tea? The children decided that they needed to smell good and not be poisonous.

Next, I showed pictures of different herbs (mint, chamomile and lemon balm) to the pupils. You could also use other herbs if they grow locally and you are sure that they are suitable for making tea.

We identified the herbs, which were also unfamiliar to the children, and one group of children went away to gather them, under adult supervision. To help the pupils identify the plants, they were allowed to take the photos with them.

Again, we classified the herbs that the children collected and, for our exhibition, put a sample of each on a tray and the children labelled them. As before, the children smelled and tasted each of the herbs, once they had checked with me that they were edible.

Next, we boiled water over our open fire in an old cooking pot, put one type of herb in at a time and made different types of tea. While the water was boiling, we played word games with herb names again.

Finally, the children tested the different teas and ranked them in order of preference. Most of them preferred chamomile tea.

It would be possible to make tea with cold water although is much slower. You could also sweeten the tea with sugar, but we did not think it was necessary.

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## Other ideas

In addition to these topics, we carried out lots of other activities on the meadow, including:

- Making clothes (out of cloth, because we did not have enough leather)
- Making pouches out of leather
- Making jewellery out of little stones, leather cords, little branches, pine cones, etc.
- Painting with paints derived from earth
- Playing games with little stones and sticks (the children thought up the rules themselves)
- Playing music using homemade (percussion) instruments
- Singing songs about the Stone Age.

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