

# EN SongLOPEDIA



## Our Lyrical Planet

A musical enrichment activity for  
Key Stage 2 & 3 Science



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**ARTS COUNCIL  
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## Notes for the Teacher

This teachers' pack is intended as a science enrichment activity for students in years 5 or 6. It should be achievable within one 45-minute session, though the ideal would be an hour.

The aim of this activity is to introduce your students to some key concepts in ecology, particularly the study of food chains. It does this using a round (otherwise known as a canon, e.g. "London's Burning", where different groups sing the same words but with staggered start times), because the nutrients in a food chain go round and round, and so does a round!

First the students will practise an existing round that they may have heard before, called "I Like The Flowers". Then, they will 'unearth' the lyrics to a new round we've written specifically for this exercise, about a circular food chain, set to almost the same tune as "I Like The Flowers". Then they will perform this new round as a class. And lastly, or as a homework exercise, there is a more freeform ecological songwriting activity.

The activity is designed to address the following bullet point on the Key Stage 2 National Curriculum in science:

### ***Animals, including humans***

- Construct and interpret a variety of food chains, identifying producers, predators and prey.

It also looks ahead to Key Stage 3, covering the following bullet point:

### ***Relationships in an ecosystem***

- The interdependence of organisms in an ecosystem, including food webs and insect pollinated crops.

## Suggested Lesson Plan

Below is a suggested plan for an hour-long lesson. Please feel free to amend as needed.

Time	Activity	Description
0	Introduction to a round (p.5).	Introduce the concept of a round. Play the recording of "I like the flowers" and get students to sing along.  p.5
10	Food chain background (p.6-7).	Students put the organisms in order in a circle.  Page of answers on that exercise - science details on who eats who and what actually happens  Go over what the key words are before moving on. - Match keyword to its definition. Students can now label their circle with the type of consumer each organism is.
20	Rhyme (p.8).	Worksheet/ slides helping students to make rhymes.
30	Matching of words for the round (p.8).	Give words for the ecology round with parts missing and examples of possible words with definite ones that will match the rhyme and metre. If any students race through this then they could possibly start thinking about what they might write if not given a framework.
40	Practice and Performance (p.9).	Students learn and perform the completed ecology round.
50	Introduce the extension task (p.10 - 12).	The extension task involves students researching into human's impacts on the natural world and conveying this learning via their own song. This can be introduced as a plenary and then completed as a homework task

## Introduction to the concept of a round

A round is a song that goes...you guessed it, round. The best way to understand how a round works is to try singing a simple one which most people know. We suggest 'I Like the Flowers'.

There is one musical riff, repeated endlessly. There are four couplets, each with a different tune to fit the riff, and the singers are divided into four groups. Group 1 begins singing, and group 2 begins as soon as group 1 reaches the second line, and so on. The end result is four lines on top of each other, in perfect harmony.

GROUP 1	GROUP 2	GROUP 3	GROUP 4
I like the flowers, I like the daffodils			
I like the mountains, I like the rolling hills	I like the flowers, I like the daffodils		
I like the fireside, When the lights are low	I like the mountains, I like the rolling hills	I like the flowers, I like the daffodils	
Doo-wop a Doo-wop a Doo-wop a Doo-wop a	I like the fireside, When the lights are low	I like the mountains, I like the rolling hills	I like the flowers, I like the daffodils
I like the flowers, I like the daffodils	Doo-wop a Doo-wop a Doo-wop a Doo-wop a	I like the fireside, When the lights are low	I like the mountains, I like the rolling hills
I like the mountains, I like the rolling hills	I like the flowers, I like the daffodils	Doo-wop a Doo-wop a Doo-wop a Doo-wop a	I like the fireside, When the lights are low
I like the fireside, When the lights are low ...etc.	I like the mountains, I like the rolling hills ...etc	I like the flowers, I like the daffodils ... etc	Doo-wop a Doo-wop a Doo-wop a Doo-wop a ...etc

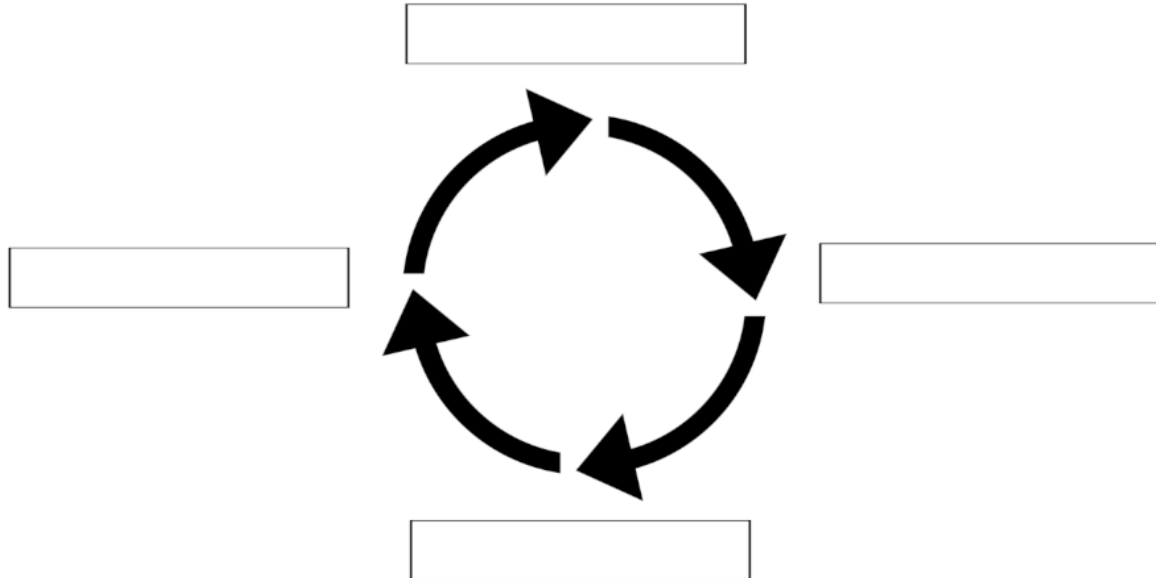
You can find the musical score for the above song on p.13 and the audio is in the slideshow.

Now divide the group in 4 and have them practice singing this song as a round.

## Ecology Background

Your students should put these organisms in order of what eats what to make a circular food chain

sheep, microbes, humans, grass



Ask your students to take notes on the following, paying special attention to note down the meaning of certain keywords

**Ecology** is the study of living things and the places where they live. Life is everywhere on Earth, and wherever you find living things, you will find food chains involving plants, animals, and microbes.

This is the food chain we are looking at today:

The plant is called the **provider**, because it provides the basis for all the meals in the ecosystem! Why? Because...

The plant is eaten, consumed, by a sheep - called a **primary consumer** - which grows big and meaty until...

The sheep is eaten by a human, who is the **secondary consumer**.

For the song to become circular, we have to ask two questions:

1. What eats humans, the secondary consumer?
2. What does a plant eat?

When asked "Who eats the human?", you will no doubt get plenty of inventive answers along the lines of "Dinosaurs!" / "Lions!" / "Other humans!"

One big lesson of the workshop is that humans, once they're buried in the ground, are eaten by microbes, and that is how the nutrients return to the beginning of the chain

In fact, the answers to the questions about what eats human, and what plants eat, are:

1. When the human dies and is buried, **microbes** - bacteria, fungi and other tiny creatures - will feed on them, and return the chemicals to the soil.
2. Those chemicals will be found by roots from plants, eagerly absorbing the chemicals so they can grow.

So, by adding the microbes, our cycle is complete: our musical round now goes all the way round.

Plants → sheep → humans → microbes → plants → sheep, etc.

In our actual ecosystems, life gets more complicated. There will be many other living things eating the leaves and hunting the sheep... If they were all to join the round, the music would be very chaotic (much like the natural world)! The full ecological 'orchestra' is called a **food web**. We have kept ours very simple.

Once your students understand how things connect, they can better understand the ecological crisis we're in: doing damage to one part does damage to many more.

### **Food chain keywords - match to definition**

The answers to the keyword matches are as follows:

- Ecology** - study of living things and the places where they live
- Provider** - provides the basis for all the meals in the ecosystem
- Primary consumer** - eats the provider
- Secondary consumer** - eats the primary consumer
- Microbes** - organisms too small for us to see
- Food web** - all of the food chains contained in an ecosystem

Now that your students know the names of the different levels in a food chain, they can add the corresponding consumer level to their food chain wheel above.

## Rhyme Practice

In order to write songs, a composer needs to have a good grasp on rhyme. A rhyme is a word that has a matching sound to another, especially at the end (e.g. "Sheep" and "jeep"). Your students are given a list of words to match with their rhymes from the word cloud.

The answers to the rhyme matches are as follows:

1. Grass - pass,
2. grow - go,
3. favour - flavour,
4. fed - dead,
5. gain - brain,
6. energy - cleverly,
7. bumble - tumble,
8. trumpet - pundit,
9. Consumer - bloomer
10. Pretender - *make own rhyme*
11. *Extension: can students think of their own rhyme pairings?*

NOTE: A couple of these are half-rhymes, not true rhymes. See p.14 for more on half-rhymes. At Ensonglopedia, we like half-rhymes!

## Completing the ecology round

Here we have provided lyrics to a round using the learning students have done during this lesson, together with a recording of it in action.

This is how the students will initially be presented with the lyrics. It is up to them to fill in the consumer organisms that have been introduced in p.4 (in yellow) and the missing rhymes (blue). The missing rhymes are amongst the rhyme pairs students have already identified on p.6.

\_\_\_\_\_ munch the grass,  
But personally, I'll \_\_\_\_\_,  
'Cos \_\_\_\_\_ tend to favour  
A sheepy kinda \_\_\_\_\_.  
The humans, once they're \_\_\_\_\_,  
Will keep the \_\_\_\_\_ nice and fed  
Which helps the \_\_\_\_\_ to grow,  
And round we \_\_\_\_\_.

The completed lyrics are as follows:

Sheep munch the grass,  
But personally, I'll pass,  
'Cos humans tend to favour  
A sheepy kinda flavour.  
The humans, once they're dead,  
Will keep the microbes nice and fed  
Which helps the grass to grow,  
And round we go.



## Performance

The group is split into four smaller groups. (It is useful if there is at least one confident singer, and/or an adult, per group.)

The four couplets that have been completed now need to be matched to the tune of 'I Like The Flowers'.

Before the class can sing a round, they first need to know all the parts! Have the completed song written up on the board, and have the entire class sing it all the way through in unison, before splitting it into a round. This part will be much more demanding because they have to hold their own tune against the singing of their neighbours. Here the help of teachers and the strong singers will be crucial.

The musical score is on p.14 and the audio recording is on the slideshow.

## Homework / follow-up task

Now that you've sung our song about a food chain, it is time to have a go at writing your own song! Your task is to write at least four lines of a song about food habits in the natural world, and humans' impact upon it. Here are our recommended steps towards becoming a nature songwriter.

### Theme

What is your song about? Pick either a specific animal, or a specific natural environment. Here are some ideas:

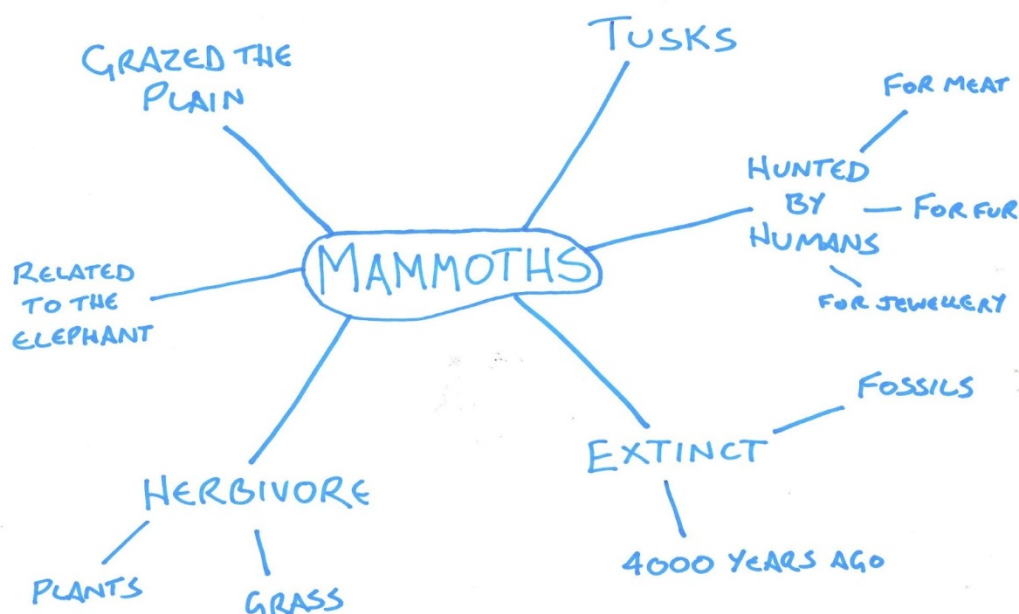
- Domesticated livestock, such as cows. What do they eat, where does that food come from, and how is that animal used by humans? What is the impact of breeding these animals on things like climate change, animal welfare and land use?
- Bees. Why are they so essential to us and to biodiversity generally? Why are they in decline, and what would happen if they disappeared?
- The oceans. How are things like climate change and overfishing affecting food chains?

Research your topic, and make notes. Your task is to communicate what you've learnt to other people through the medium of song.

### Mind Mapping, also known as making a Spider Diagram

Grab a big sheet of paper. Write the main theme of your song in the very middle (for my example below, my main theme will be 'Mammoths').

Round about that word or phrase, write the subthemes – the smaller subjects within that large subject that you might want to mention in the song. Draw lines between the central theme and the subthemes. The subthemes might have sub-subthemes of their own. For example:



## Rhymes

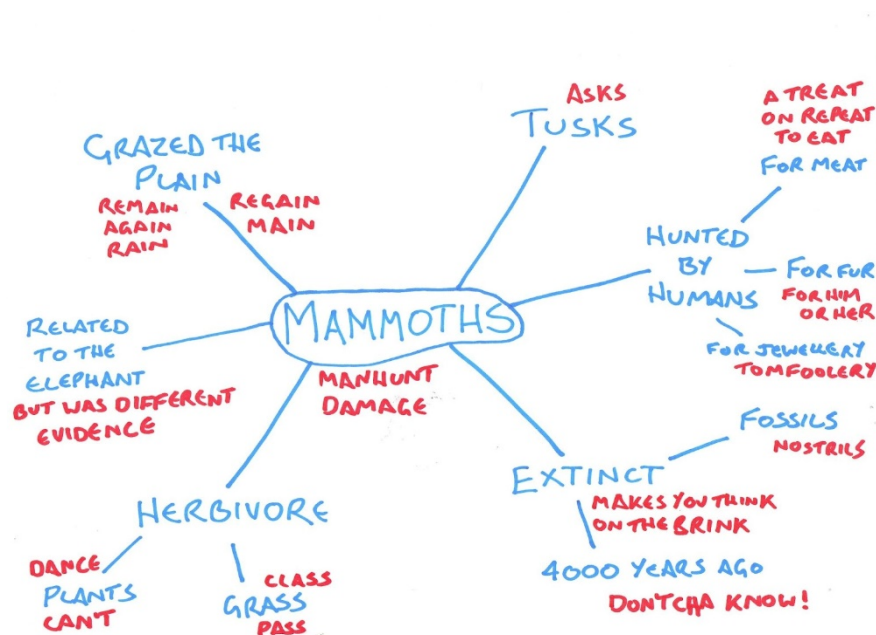
A rhyme is a word that ends with the same sound as another word. "Rhyme" rhymes with "time" because you say "-ime" at the end of them, even though it's spelled differently.

A NOTE ABOUT HALF-RHYMES: "Rhyme" also rhymes with "line" and "find", even though the consonant at the end is different. Similarly, "nature" rhymes with "future", even though the vowel sound in the middle is different. This is called a half-rhyme, and *half-rhymes can be reeeeeeally useful*. You are allowed to use them in your song, and don't let anybody tell you otherwise.

Next to each subtheme (or sub-subtheme) on your piece of paper, write down a few rhyming words (or half-rhyming words). I'd suggest doing this in a different colour pen.

The most useful words are ones that are themselves something to do with the theme. For example, if your theme was "horses", and one of your subthemes was "hay", then a good rhyming word might be "neigh" (because it's something that horses do!). Don't forget to find a rhyme or two for the word(s) in the centre of your page!

For example:



## Rhyming Couplets

Now pick your two-ish favourite rhymes from your sheet, and expand these into rhyming couplets (a pair of lines where the words at the end rhyme). To figure out how long each line should be, try clapping along and finding a rhythm that you think works well. If you can think of two lines that go together, so much the better.

For example (I've underlined the syllables where I'd clap):

The mammoths grazed this ancient plain,  
Now just their skeletons remain.  
We ate their meat. Now they're extinct.  
We've done worse since. It makes you think.

## Song Structure

The rest of this exercise is optional. Carry on if you're having fun

The main parts of a song are:

- The intro (which introduces the theme)
- The verses (there are normally at least two of these, sometimes many more, which usually follow the same rhythm as each other, and each one will probably be about a different subtheme)
- The chorus (this should be really catchy, possibly quite short, and should be about your main theme)
- The middle-8 (this usually occurs just once, perhaps after the second chorus, and is an opportunity to surprise the listener with a different rhythm and a different point of view on your theme)

(There are more elements to song structure, and not all songs have all of these. This is a deliberate simplification.)

Look at the lyrics you've written. Is it a chorus? Is it a verse? Is it an intro? If you think it's a verse, great! That means you need at least another verse and a chorus. If you think it's a chorus, fantastic! That means you need to settle down and think about what the verses are going to be.

## Music

Does a tune pop into your head when you say the words? If so, try singing it. If not, try singing it anyway and see what happens. Or maybe it's a rap?

If you're lucky enough to play a musical instrument, why not have a go at adding some music to your song? If you don't, maybe you have some friends who do? Maybe it's time to form a band?

Or maybe, just maybe, you have in front of you two or four lines that you're kinda half-pleased with, and it was really hard work to get to this point, and you're exhausted, and that's fine. It really doesn't matter that your friend next to you has written three times as much. You've written some lyrics, maybe for the first time in your life, and that means you can write some lyrics again whenever you feel like it. And that's good enough for me.

# Appendix 1

## Score for I Like the Flowers

### I Like the Flowers

$\text{♩} = 120$  **Swing!**  $\text{♩} = \text{♩}^{\text{3}}$  trad.



F D<sub>m</sub> G<sub>m</sub> C<sub>7</sub>

I like the flo - wers, I like the daf - fo - dils,

3 F D<sub>m</sub> G<sub>m</sub> C<sub>7</sub>

I like the moun - tains, I like the rol - ling hills, And

5 F D<sub>m</sub> G<sub>m</sub> C<sub>7</sub>

I like the fi - re - side When the lights are low, Sing - ing

7 F D<sub>m</sub> G<sub>m</sub> C<sub>7</sub>

"Doo - wop - a doo - wop - a doo - wop - a doo - wop - a".

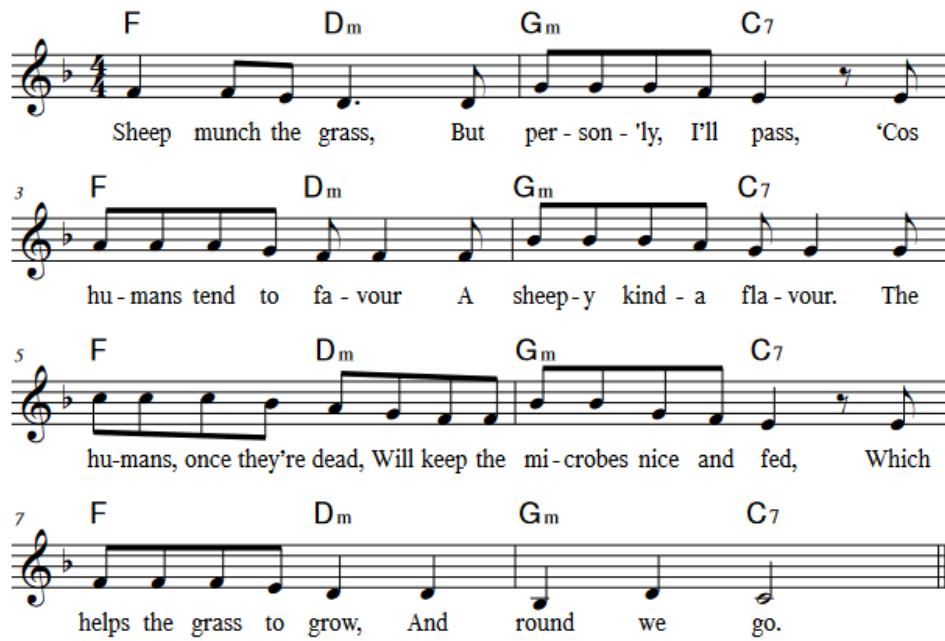
## Appendix 2

### Score for Completed Ecology Song

# Sheep Munch the Grass

♩ = 120 Swing! ♩♩ = ♩<sup>3</sup>♩

John Hinton



F Dm Gm C7  
Sheep munch the grass, But per-son-'ly, I'll pass, 'Cos

3 F Dm Gm C7  
hu-mans tend to fa-vour A sheep-y kind-a fla-vour. The

5 F Dm Gm C7  
hu-mans, once they're dead, Will keep the mi-crobes nice and fed, Which


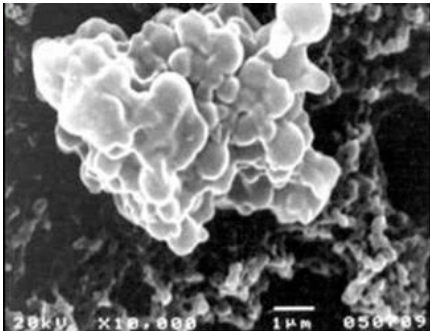


7 F Dm Gm C7  
helps the grass to grow, And round we go.

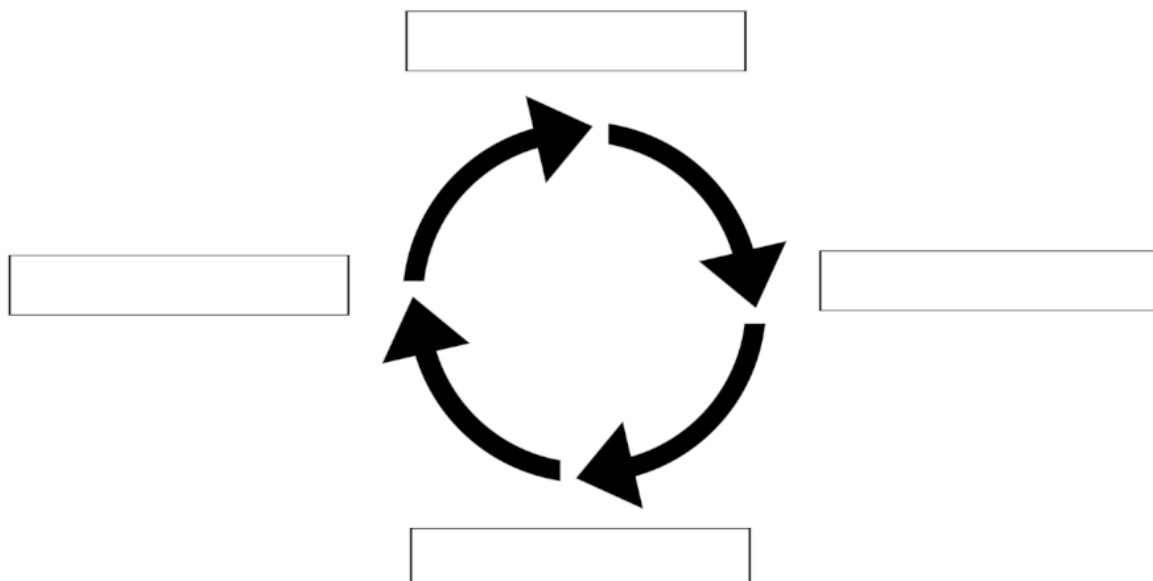
# Student Pack - Our Lyrical Planet

**Name**

**Dat**

Put these organisms in order of what eats what to make a circular food chain

 <p><b>Grass</b></p>	 <p><b>Microbes</b></p>
 <p><b>Humans</b></p>	 <p><b>Sheep</b></p>



Food chain keywords – connect the keywords in bold to their definition with a line

<b>Ecology</b>		Eats the provider
<b>Provider</b>		Organisms too small for us to see
<b>Primary consumer</b>		Study of living things and the places where they live
<b>Secondary consumer</b>		Organisms too small for us to see
<b>Microbes</b>		All of the connected food chains within an ecosystem
<b>Food web</b>		Provides the basis for all the meals in the ecosystem

Match the words to rhyming words

Pundit, tumble, dead, pass, bloomer,  
go, brain, flavour, cleverly

Grass

Grow

Favour

Fed

Energy

Bumble



Trumpet	<input type="text"/>
Consumer	<input type="text"/>
Gain	<input type="text"/>
Pretender (make your own rhyme)	<input type="text"/>

Can you think of any of your own rhyme pairings?

### Completing the Lyrics

Fill in the consumer organisms that have been introduced in p.4 (in yellow) and the missing rhymes (blue). The missing rhymes are amongst the rhyme pairs you have already identified.

*munch the grass,*  
*But personally, I'll ,*  
*'Cos  tend to favour*  
*A sheepy kinda .*  
*The humans, once they're ,*  
*Will keep the  nice and fed*  
*Which helps the  to grow,*  
*And round we .*

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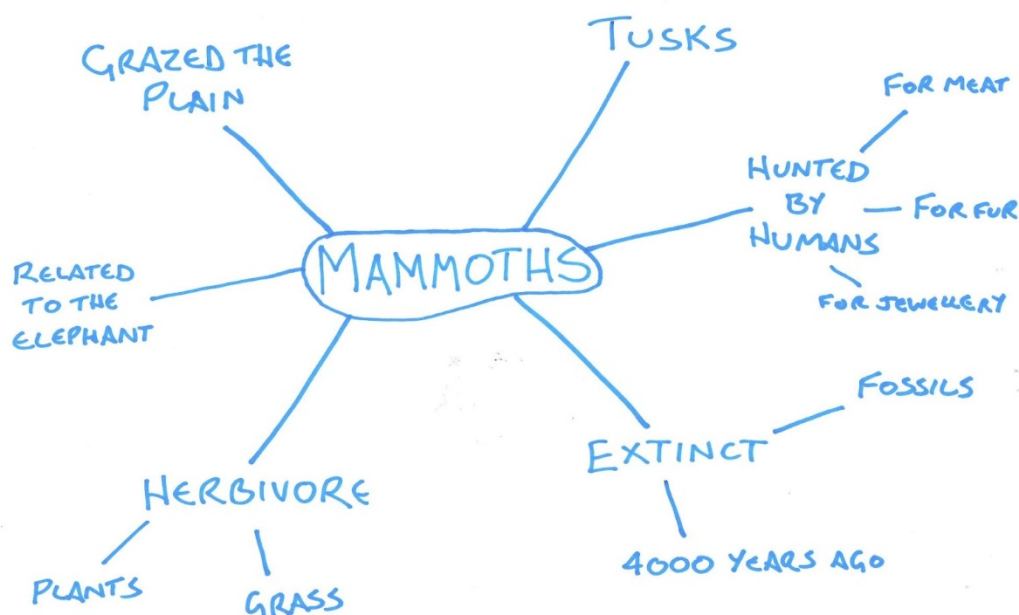
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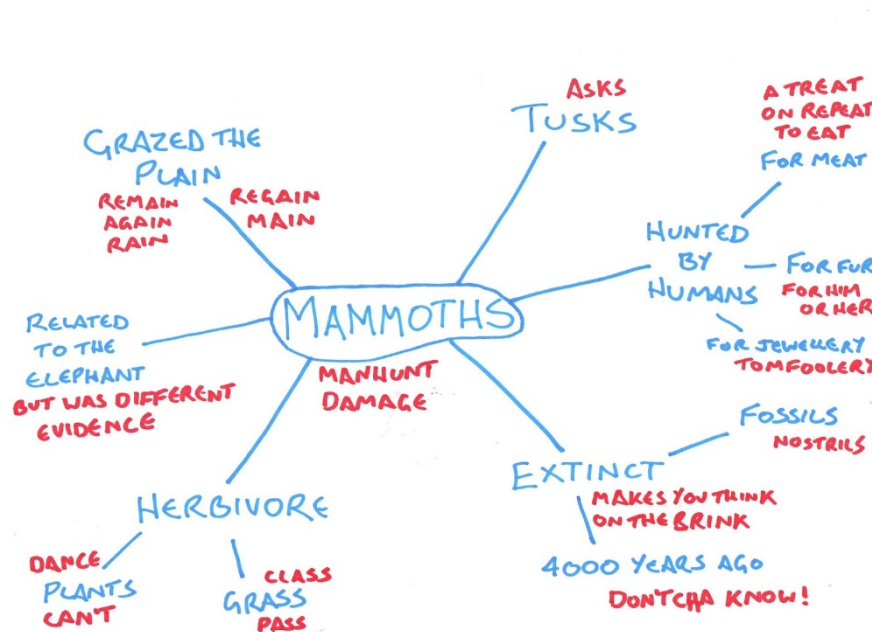
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