# Key Stage 2: mini-module lesson 1



| Theme - PSHE /Science Keeping Healthy | Class:<br>Date: | I know what bacteria and viruses are | Teacher: |
|---|---|---|---|

| National Curriculum and PSHE Objectives | Learning Outcome Success Criteria | Teaching and Learning<br>This is designed to be taught in a classroom but a large hall space will work equally well. |
|---|---|---|

**Science Curriculum KS2**

Pupils should recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.

Pupils should learn how to keep their bodies healthy and how their bodies might be damaged – including how some drugs and other substances can be harmful to the human body.

**PSHE Association Programme of Study**

What is meant by a healthy lifestyle.

How to maintain physical, mental and emotional health and wellbeing.

How to manage risks to physical and emotional health and wellbeing.

Ways of keeping physically and emotionally safe.

**Learning Outcome**

I know what bacteria and viruses are.

**Success Criteria**

I can explain what bacteria and viruses (germs) are.

I can show that I understand how they can get into someone's body.

I can explain how our bodies get rid of them when they do get in.

## Before the lesson

Children at tables in groups of up to six. Download / access to Lesson Plan Support PPT and PPT notes containing embedded images and film.(available at www.sharegoodtimesnotflu.co.uk/inschools).

Have prepared:

- Blank A4 sheet for each child
- An ordinary pencil and a coloured pencil for each child
- Images of real bacteria and viruses either on the interactive whiteboard (IWB) or use Pupil Information sheet 1 - Germs
- Outline human body on the IWB, flipchart or large piece of paper for class teacher (CT)
- **On the board, and visible throughout, have the success criteria displayed ready for the plenary.**

*Negotiate or agree 'ground rules'. If these are already embedded, remind the class about them. If this session is taught by an unfamiliar adult discuss these before the lesson with the CT.*

*These 'rules' can be prepared beforehand and displayed on the board or on a piece of paper at the beginning of the session if it is felt appropriate or necessary.*

## Lesson

**Starter/introduction**

Baseline assessment to identify children's existing knowledge, understanding, misconceptions etc: **Give the children a piece of paper each and ask them, on their own, without sharing their ideas yet, to 'draw a germ' and write around it how their germ might make people feel if it gets into their body. Come together and share their pictures and ideas. Draw out that germs can sometimes make us feel unwell. What might that feel like? How do we feel when we're unwell? Ask children to put their pictures to one side as they will need them again at the end.**

**Explain/remind that the scientific words for germs are bacteria and viruses. Write the words on the board. It is important to stress that not all illnesses are caused by germs. People can be unwell/poorly for lots of reasons: they might not have caught the illness from anyone else and it might not be an illness that can be caught from them. Today and over the next two lessons we will be talking about flu which are spread by viruses/germs passing from person to person.**

**Show pictures of real bacteria and viruses, including a flu virus (either on the IWB or use Pupil Information Sheet 2). Why can't we see them when we look around us?** Draw out that they are all so small we need a microscope to see them and that some are much smaller than others, for example the flu virus which is about 100 times smaller than most bacteria.

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| **National Curriculum and PSHE Objectives** | **Learning Outcome Success Criteria** | **Teaching and Learning**<br>This is designed to be taught in a classroom but a large hall space will work equally well. |
|---|---|---|
| | | **Why can it be a problem for us that bacteria and viruses are too small to see?** Children should suggest because we can't see where they are, we don't know when they get onto our skin or into our bodies and they can then make us unwell.<br><br>**Show Human Body outline on the IWB or flip chart. Quick chat with neighbour/talking partner – How can bacteria and viruses get into our bodies?** Take feedback and write/draw around the outline all the ways suggested.<br><br>**In groups on their tables, ask children to brainstorm all the things that might help us get better if a germ has made us poorly/unwell. Draw together ideas on the board.** Going to the doctor, medicines, resting/sleeping, our own bodies ( if this doesn't come up, add it into the discussion).<br><br>**How can our own bodies help us get better when germs have made us unwell? Have you heard of the immune system? What do you know about it and what it does?**<br><br>**Explain that all of us produce antibodies in our blood and that these are tiny cells that fight any germs that get inside us. Explain that when germs get inside our bodies our immune system recognises them, knows they shouldn't be there, creates the right kind of antibodies and sends them in the blood to attack and kill the germs. Sometimes when this happens our antibodies find it easy to protect us from some germs and we don't even notice that they are at work. Sometimes the germs are stronger and our antibodies have to fight really hard to protect us – we know they are fighting really hard because we feel unwell. Sometimes our antibodies need some help and parents, carers, doctors or nurses will give us medicine to help our immune system in protecting us and getting us better.**<br><br>**Look at the picture you drew of a germ at the beginning and how it might make someone feel if it got inside their body. With a different coloured pencil, make any changes you'd like to, based on our lesson today. Now add anything you know, understand, think or feel now that you didn't know, understand, think or feel before the lesson. Now write your name at the top.** The children's amended pictures will provide assessment evidence of progress during the lesson. |

## Plenary

**Have you any questions about what we have learned today?**

**Next time we will be thinking about whose responsibility it is to keep us healthy and how we can help**

Refer to the success criteria.
**Let's look at what we have been learning about today.**
Thumbs up go through success criteria asking for thumbs up, down, middle. CT to use this AfL to plan next steps or to pre-empt any possible challenges or misconceptions about nasal spray flu vaccine.

**Well done. Good work today!**

# Key Stage 2: mini-module lesson 2



| Theme - PSHE /Science Keeping Healthy | Class:<br>Date: | I know who keeps me well and how I can help | Teacher: |
|---|---|---|---|

| National Curriculum and PSHE Objectives | Learning Outcome Success Criteria | Teaching and Learning<br>This is designed to be taught in a classroom but a large hall space will work equally well. |
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**Science Curriculum 2014 KS2**

Pupils should recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.

Pupils should learn how to keep their bodies healthy and how their bodies might be damaged – including how some drugs and other substances can be harmful to the human body.

**PSHE Association Programme of Study**

How to maintain physical, mental and emotional health and wellbeing.

How to manage risks to physical and emotional health and wellbeing.

Ways of keeping physically and emotionally safe.

**Learning Outcome**

I know who is responsible for keeping me well and that we all have responsibilities for keeping ourselves and other people well.

**Success Criteria**

I can tell you who is responsible for keeping me well.

I can explain how I can help them to keep me well.

## Before the lesson

Children at tables in groups of up to six. Download / access to Lesson Plan Support PPT and notes containing embedded images and film (available at www.sharegoodtimesnotflu.co.uk/inschools).

Have prepared:-

- Blank A4 sheet for each child
- A pencil for each child
- A large sheet of paper and a marker pen for each table
- **On the board, and visible throughout, have the success criteria displayed ready for the plenary.**

*Negotiate or agree 'ground rules'. If these are already embedded, remind the class about them. If this session is taught by an unfamiliar adult discuss these before the lesson with the class teacher (CT).*

*These 'rules' can be prepared beforehand and displayed on the board or on a piece of paper at the beginning of the session if it is felt appropriate or necessary.*

## Lesson

**Starter/introduction**

**Explain that we are all going to take part in a class survey. Ask the children to work on their own. Invite them to draw or write down all the people whose responsibility it is to keep them healthy and well.**

**Create a chart on the whiteboard that categorises what they think (e.g. parents or grown-ups, teachers, doctors, nurses, dentists, the government, myself).** If the category 'myself' does not naturally emerge, talk about this and add it.

**How do all the different people in these categories help you to keep healthy and well – what is it they do? Give each table/group a category e.g. 'mums, dads, carers'; 'Doctors and nurses'. Groups brainstorm all the ways these people might help keep them healthy and well. One group member writes the group's ideas on their sheet. Groups feedback to the class. Collect and display the sheets on the wall.**

**Sometimes some of the people we've just discussed need to give us things to keep us well and healthy. How do we know we should trust these people?** There is an important and complex issue here that needs to be explored.



JBN: 838,012.011 | November 2015

# **Key Stage 2:** mini-module lesson 2

| **Theme** - PSHE /Science Keeping Healthy | | **Class:**<br>**Date:** | **I know who keeps me well and how I can help** | **Teacher:** |
|---|---|---|---|---|
| **National Curriculum and PSHE Objectives** | **Learning Outcome Success Criteria** | **Teaching and Learning**<br>This is designed to be taught in a classroom but a large hall space will work equally well. | | |

**Discuss with children the differences between:**

- **People who know us well and who care for us and who know enough to help us decide what is safe and what is not safe for us, for example, our parents and carers or our teachers.**
- **People who know us well and who care for us but may not know enough to know what is safe and what is not safe for us, for example, our friends and especially our friends' parents;** for example, a friend's parent could give our friend medicine but should not give us medicine.
- **People who may not know us well, or even at all, but who have qualifications and jobs that let us trust them to know what is safe and not safe, for example doctors and nurses.**

Now let's vote on which category of people from the survey we think is the most important. You've each got two votes so you can each pick two. If some children comment that they are finding it hard to decide, ask them why and discuss.

**Why did you choose the two that you voted for?** Gather the children's reasons and write them up next to each category. Fill any gaps and correct misconceptions.

**Invite children to take turns to mime something they could do to keep healthy and help the people they have identified to keep them healthy. Ask the class to guess what they are doing.** Explore how doing things to keep ourselves healthy and well, such as washing our hands, catching sneezes in tissues etc, helps the people we've identified, as they then don't need to give us medicines to make us better and so on.

## Plenary

**Have you any questions about what we have learned today?**

**Next time we will be learning about vaccination and how it can help keep people and the community well.**

Refer to the success criteria.
**Let's look at what we have been learning about today.**
Thumbs up go through success criteria asking for thumbs up, down, middle. CT to use this AfL to plan next steps or to pre-empt any possible challenges or misconceptions about nasal spray flu vaccine.

**Turn to your partner and tell each other why it is helpful to parents, doctors, nurses etc if we do our best to keep ourselves healthy? Why is it good for everyone else around us if we do our best to keep ourselves healthy?**

**Well done. Good work today!**

# Key Stage 2: mini-module lesson 3

| Theme - PSHE /Science Keeping Healthy | Class:<br>Date: | I know what a vaccination is and how it can help keep people and the community well. | Teacher: |
|---|---|---|---|

| National Curriculum and PSHE Objectives | Learning Outcome Success Criteria | Teaching and Learning<br>This is designed to be taught in a classroom but a large hall space will work equally well. |
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**Science Curriculum 2014 KS2**

Pupils should recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.

Pupils should learn how to keep their bodies healthy and how their bodies might be damaged – including how some drugs and other substances can be harmful to the human body.

**PSHE Association Programme of Study**

How to maintain physical, mental and emotional health and wellbeing.

How to manage risks to physical and emotional health and wellbeing.

Ways of keeping physically and emotionally safe.

How to make informed choices about health and wellbeing and to recognise sources of help with this.

**Intended Learning Outcome**

I understand what a vaccination is and how flu vaccination helps keep people well.

**Success Criteria**

I can explain what we mean by 'vaccination'.

I can explain how vaccinations can keep individual people well and also protect their families and community.

I can explain how the flu vaccination is given.

## Before the lesson

Children at tables in groups of up to six. Download / access to Lesson Plan Support PPT and PPT notes containing embedded images and films (available at www.sharegoodtimesnotflu.co.uk/inschools).

Have prepared:

- Pupil Information sheet 1 - Germs
- A small sheet of paper or Post-it® notes for each child
- **On the board, and visible throughout, have the success criteria displayed ready for the plenary.**

*Negotiate or agree 'ground rules'. If these are already embedded, remind the class about them. If this session is taught by an unfamiliar adult discuss these before the lesson with the class teacher (CT).*

*These 'rules' can be prepared beforehand and displayed on the board or on a piece of paper at the beginning of the session if it is felt appropriate or necessary.*

It is important throughout to refer to 'children' rather than 'you' / 'us' as some parents might not consent to the vaccination, so not all the pupils will necessarily receive it. It is important that any pupils not receiving the vaccination, or who have not received vaccinations in the past, are not stigmatised in any way.

## Lesson

**Starter/introduction**

**Remind the class of previous learning about 'germs', especially viruses such as the flu virus.** Show the image of a flu virus. **In your group, one person starts - complete the sentence 'I know that germs….'. Everyone takes a turn – can we think of something different each time? How many times can you go round your group before you run out of ideas?** Circulate and gauge recall from previous lesson.

**If we might have germs inside us, how could we protect other people from getting our germs?** Explore or reinforce: the importance of washing our hands after going to the toilet, before eating or drinking anything, or touching something someone else will eat or drink; of coughing and sneezing into tissues rather than over other people and always throwing used tissues in a bin.

**What would be a good way for everyone in school to remember how to stop germs spreading?** If time allows, create a cartoon strip and rhyme or slogan that reminds everyone how to stop the spread of germs. Alternatively, pupils could make up a one or two line rhyme or slogan that could be incorporated into posters to put up around school.

**Remind the children that that not all illnesses are caused by germs and that people can be unwell/poorly for lots of reasons: they might not have caught the illness from anyone else and it might not be an illness that can be caught from them. Teachers' Notes - key points to consider. One illness that is caused by a germ is flu which is spread by viruses passing from person to person.**

**What do you know about or have you heard about flu?**

# **Key Stage 2:** mini-module lesson 3

| **Theme** - PSHE /Science Keeping Healthy | **Class:**<br>**Date:** | **I know what a vaccination is and how it can help keep people and the community well.** | **Teacher:** |
|---|---|---|---|

| **National Curriculum and PSHE Objectives** | **Learning Outcome Success Criteria** | **Teaching and Learning**<br>This is designed to be taught in a classroom but a large hall space will work equally well. |
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**Briefly explain what it is, symptoms, that it can be serious and make us very poorly. Explain how it differs from a cold. Alternatively if time allows, show cold/flu animation from SGTNF site** www.sharegoodtimesnotflu.co.uk/flu-symptoms.html

| FLU | | COLD | |
|---|---|---|---|
| Sudden fever of 38-40°C | Sore muscles | Runny / blocked nose | Sore throat |
| Sweating | Feel exhausted/need to lie down | Sneezing | Cough |
| Dry, chesty cough | Sneezing | Mild fever | Mild earache |
| Symptoms come on very quickly | Symptoms may take up to a week to disappear | Tiredness | Headache |
| Tiredness can last for over a week | | Symptoms take a few days to come on | Symptoms take a few days to disappear |

**Role play** *everyone standing in a big space*

**We are going to show how quickly viruses can be spread. I am (or X is) pretending to have the flu virus. I will show that I have it by putting one arm behind my back. If I touch you on the shoulder you will also have the flu virus. You will need to put one arm behind your back and you can then touch other people who have not yet got the virus. Let's see how long it takes to 'infect' everyone in the room.** Stop when everyone 'has flu'.

**Can you see how quickly germs can spread even in a big group like this? You can't see germs but they are always around, on and in our bodies.**

**Remind the children that when germs like the flu virus get inside our bodies, our immune system needs to recognise the virus so that our body can make the right type of antibody to fight it. But what if our immune system can't recognise the germ because it's one that hasn't got into our bodies before? It wouldn't know how to make the right type of antibody. For some germs like the flu virus, people can have a 'vaccination' which teaches our immune system to make the right antibodies to fight them. Now if we get the germs inside us which would give us that illness, our immune system recognises them, produces the right antibodies and protects us. In fact it can protect us so well we might not ever know we had those germs inside us. We are now 'immune' to that illness! It is something we don't have to worry about and because we can't have this illness we can't give it to other people either.**

**Role play**

**We're going to do the same activity again, with everyone walking around and me (or a pupil) 'with flu' touching people on the shoulder. But this time, everyone else is going to fold their arms in front of their chest to show they have had the flu vaccination and this time, even if they're touched on the shoulder, they keep walking around with their arms folded – they don't 'catch flu'.**

# **Key Stage 2:** mini-module lesson 3

| **Theme** - PSHE /Science Keeping Healthy | **Class:**<br>**Date:** | **I know what a vaccination is and how it can help keep people and the community well.** | **Teacher:** |
|---|---|---|---|

| **National Curriculum and PSHE Objectives** | **Learning Outcome Success Criteria** | **Teaching and Learning**<br>This is designed to be taught in a classroom but a large hall space will work equally well. |
|---|---|---|
| | | **Even if the person 'with flu' walked around for a week or two until they got better, would any of the others catch flu? And would any of the people who've been touched but have their arms folded pass the flu onto anyone else?** Draw out that the people who have been vaccinated can't get the illness and also as fewer people can have the illness, there is less chance of them infecting others who haven't yet been vaccinated. So vaccination doesn't just protect the person vaccinated but everyone else they come into contact with. We share a responsibility to those around us not only to keep ourselves healthy and well but also to reduce the chances of germs spreading from our bodies to other people's.<br><br>**Show an image of the plunger and explain that the vaccine/medicine is inside the tube. The tube has a plunger and will be placed in the child's nose, (show image using 'Share Good Times not Flu' resources and the plunger pressed. This will happen in both nostrils.** Reassure children that this will not hurt and that they can breathe normally all the way through because it just squirts a bit of vaccine in.<br><br>**Alternative: show video clip of someone receiving the vaccination and explain what's happening, as above.**<br><br>**This liquid will help stop children from getting flu and, importantly, that means that THEY will also be stopping their germs from spreading to other people.**<br><br>**On ..... a nurse will be coming in to school to give CHILDREN this vaccine so that CHILDREN will not catch the flu germ and THEY will not then spread it to others. THE CHILDREN'S mums, dads, carers will be asked permission for their children to be given the flu vaccination. You may wish to hand out or refer to leaflets and consent forms at this time.** |

## Plenary

**Have you any questions about what we have learned today?**

Refer to the success criteria.
**Let's look at what we have been learning about today.**
Thumbs up go through success criteria asking for thumbs up, down, middle.

**Reflection: we've seen that vaccination can protect people from illnesses like flu and that if lots of people are vaccinated it makes it much harder for flu to spread and therefore protects the whole community. Do we all share responsibility for keeping ourselves and each other healthy and well?**

**On a small sheet of paper or Post-it® notes, quickly write down anything you're still not sure about, want to learn more about, or any questions you still have about the vaccination.** Collect up on a large sheet/board (Post-its®) or in a question box. Use this to determine whether further clarification or discussion is needed prior to the vaccination.

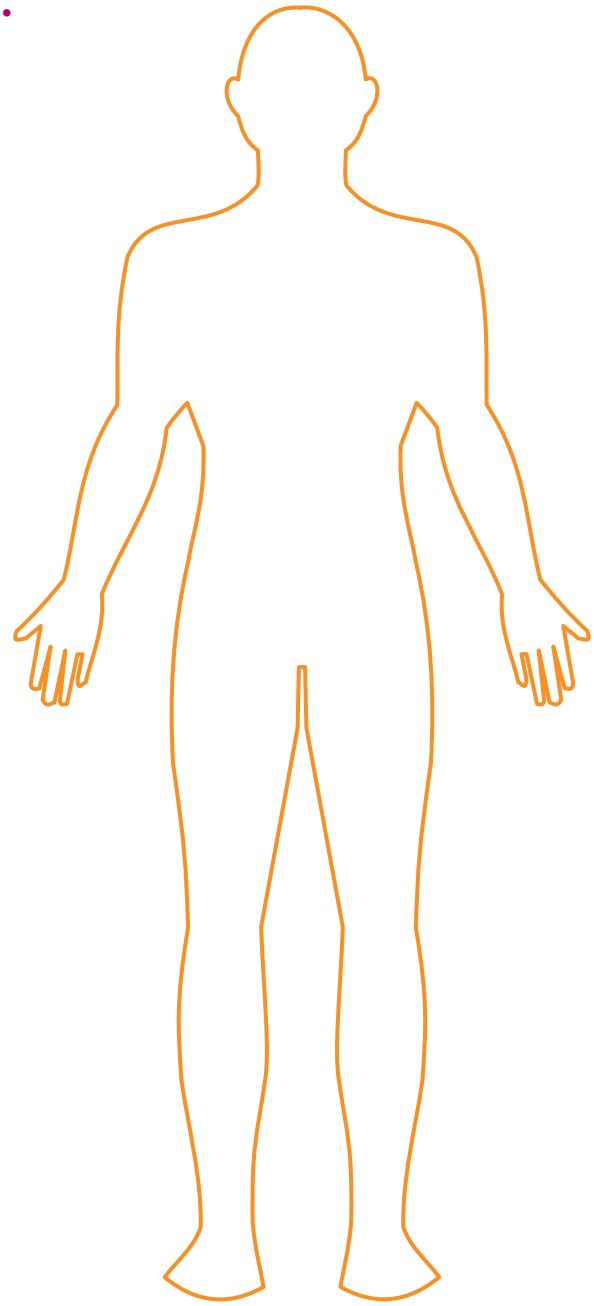
**Well done. Good work today!**

Key Stage 2 Core Lesson

# Pupil Worksheet 1 - Human Body

Teachers' note: **Enlarge to A3**

## This person is feeling very poorly. Draw or write how this person is feeling.



## How do you feel when you are not well?



Provided as a service to education by AstraZeneca

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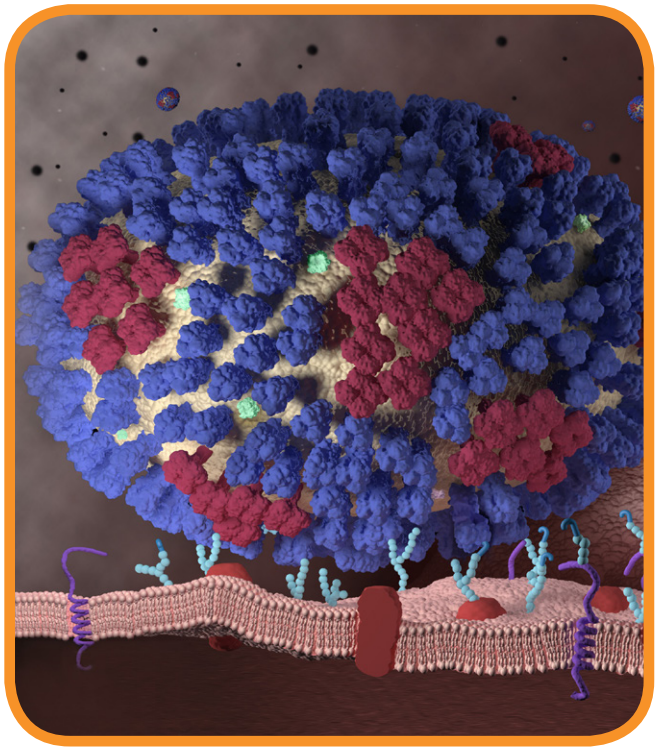
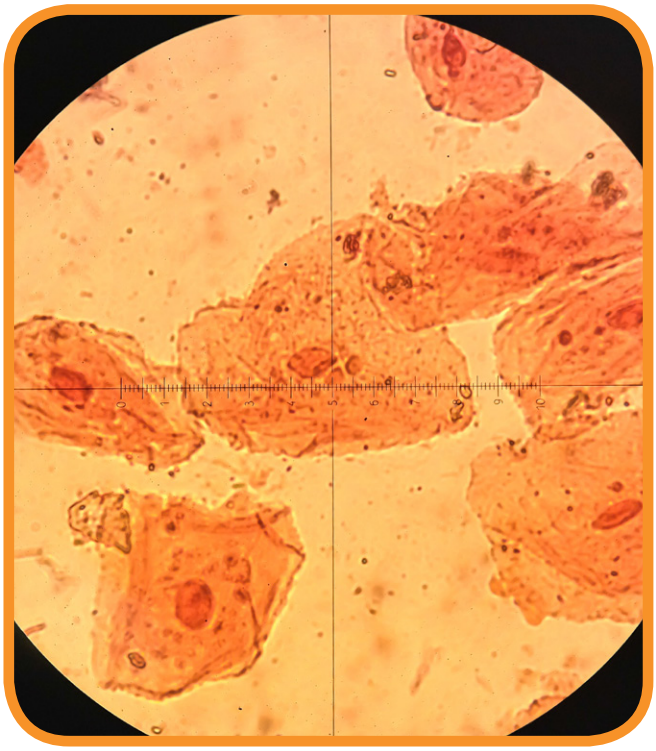
Key Stage 2 Core and Mini-Modules 1 and 3

# Pupil Information sheet





Courtesy of Centers for Disease Control and Prevention 2013