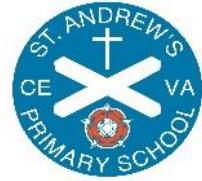


Dear Parents/ Carers,

Please find below information about what your child is learning this term- we call it a 'Knowledge Organiser' for our new Connected Curriculum. The last section of the Knowledge Organiser offers ideas of how adults can support children at home and gives information about homework.



Please speak to your child's class teacher if you have any questions.

Knowledge Organiser for Y4 unit: How do I see? How do I hear?

Knowledge to be secured (What do learners need to know and understand?)

Science

- They will recognise that they need light in order to see things and that dark is the absence of light.
- They will notice that light is reflected from surfaces.
- They will recognise that light from the sun can be dangerous and that there are ways to protect their eyes.
- They will recognise that shadows are formed when the light from a light source is blocked by a solid object.
- They will find patterns in the way that the size of the shadows change.
- They will be able to identify how sounds are made, associating some of them with something vibrating.
- They will recognise that vibrations from sounds travel through a medium to the ear.
- They will identify the patterns between the pitch of a sound and features of the object that produced it.
- They will identify patterns between the volume of a sound and the strength of the vibrations that produced it.
- They will recognise that sounds get fainter as the distance from the sound source increases.

Terminology and vocabulary we will be using:

day, distance, longer, shorter, length, material, dim, block, object, clear, opaque, transparent, translucent.
night, midday, dark, light, light source, torch, bright, sun, position, higher, shadow, direction.

Spelling patterns we will be looking at in Fast Spelling/Phonics sounds: Homophones, 'ee', 'u', 'ou'

business, fruit, accident, increase, length, popular, mention, weather, whether, rain, meddle, medal, rein, reign, believe, difficult, forwards, height, therefore, caught, accidentally, naughty,
he'll, heal, missed, mist, plain, here, hear,
plane, suppose, question, enough, complete, between, concrete, breathe, speech, sincere, steam, forward, young, touch, rough, country, trouble, double, couple, cousin.

Skills to be secured. Learners will know how to...

- Ask relevant questions and use different types of scientific enquiry to answer them.
- Set up simple and practical enquiries comparative and fair tests.
- Take accurate measurements using standard units.
- Research and develop designs.
- Evaluate products.

Links to other areas of learning/the curriculum

DT – To design and make ear muffs.

Art – To use shadows, silhouettes and a range of materials (opaque, translucent and transparent) to create a portrait collage.

The journey... Starting Point: Their questions and hypotheses will be displayed on the Wonder Wall and this will form the basis for their scientific enquiry and learning over the course of the Learning Unit. Children receive a letter from Edi a factory worker, who struggles to sleep during the day as he works night shifts. Their job is solve his problem through learning about light and sound. Finishing point: Children will have designed a product to solve Edi's problem, which will allow him to sleep in comfort. They will be able to explain how the product works using scientific vocabulary.	Planned or possible experiences, visits or visitors

Ways parents/ carers can support/ Homework

Homework activities for your children:

- Design a jacket/school bag to enable school children to be more visible in the dark when walking home from school.
- Secret messages - write a secret message to a friend using a mirror to help you reverse the letters/words so it can only be read using another mirror.
- Draw an eye - Use a mirror to closely observe your eye. Using a landscape piece of paper, make a large detailed drawing using pencil.
- Make a flick book. Choose a simple action that can be easily drawn e.g. a ball going up and down, a circle getting bigger then smaller. Using small pieces of paper or cheap note books, draw on each page a gradual change so that when the pages are flicked the image appears to move.
- We do fortnightly spelling tests and daily Fast Spelling & Fast Maths, which involves regular targeted practice in class. Please support your child with learning the words and sounds listed on this knowledge organiser and ensuring your child knows their multiplication tables up to 12×12 with rapid recall.
- It is a whole school expectation that your child reads five times a week (or more) at home.
- Reading books will only be changed on a **Monday and Thursday**. Children must have their reading book and journal in school **every day**.

PE days are Tuesday and Wednesday. Please ensure that children's PE kits are in school for these days and make sure earrings are not worn on PE days too.

During this school year please help your child to achieve the following five challenges – they could be recorded in reading records or by photograph and sent into school:

Explore a cave.
Walk through a forest.
Swim outside.
Learn to sew on a button.
Go hiking.