



Early Science by ClicSoft:

Overview

Early Science is a collection of bright and colourful interactive activity screens with supporting worksheets and 'write about' screens to support Key Stage 1 science work. The software (which is also available in Welsh), supports learning in Science 2: Life Processes and Living Things, Science 3: Materials and their properties and Science 4: Physical Processes, and is suitable for Foundation and Key Stage 1 pupils.

The interactive activities contain self-correcting exercises (some with further levels), printable and adaptable worksheets and write on screens that are also printable. Activities are clear, audible and specific to the learning objective. A useful option for pupils of lower ability is the facility to limit the number of activity answers per screen. There is an assessment tracking record sheet, which monitors pupil performance on the activities. Supporting worksheets are very simple to produce to reinforce concepts. Full and real speech is used throughout and the program is very simple to use and navigate around.

The product is probably best used individually especially if the assessment facilities are utilised. There are many opportunities for shared and collaborative learning and many activities would make an ideal teacher-led activity for the whole class – especially if used on an interactive whiteboard. The software relates directly to specific aspects from the science QCA Schemes of Work, although not all areas are covered.

I found this software extremely useful. The pupils liked the animations, colours, sounds and pictures and were keen to attempt the activities. This software should prove invaluable in the classroom. Image

Publisher
ClicSoft Ltd
Subject
Cross Curricular
Key Stage
Key Stage 1 / P1 - P2

Classroom use

Context

This software was used during the spring term with a mixed ability class of Year 1 pupils, who were studying physical processes, and with a mixed ability Year 2 class studying materials and their properties. Several activities were introduced to the whole class with pupils volunteering to complete some of the activities. Key knowledge and concepts were discussed as the activity developed. An activity sheet was devised as a whole class and printed for later completion. A writing screen was explored and a class composed effort was typed in and printed for display.

Labour saving aspects

Once the software has been installed the disc is not required to run it again. Navigation between the menu options and screens is simple and requires minimum mouse movements. The short six page guide is not complicated to familiarise oneself with and there is also a single page screen with several samples of various screen scenarios. This gives you a very quick overview of the various screens and it quickly enables teachers to see the full potential of the program.

Learning outcomes

By working through the activities, pupils should be developing their knowledge of specific scientific objectives as detailed in the QCA Scheme of Work. The resource could be used in small groups and pupils should be encouraged to discuss and agree on answers. A record of achievement sheet can be printed detailing activity, score and time to complete. This is only accessible during the current attempt. Instant feedback is given to the users and if wrong answers are given, the program instantly encourages further attempts after revealing the error instantly. The activities can be pre-set in terms of difficulty by clicking on a number and then limiting the amount of answers for pupils to give. This is then reflected in the summary performance print out sheet.

Student Response

The pupils really enjoyed working with this software. They listened carefully and volunteered readily to attempt the activities when it was introduced to the whole class. The clear and colourful graphics engaged their interest and the clear audible speech ensured all pupils were able to access the activities. Most pupils were very keen to work through the activities and to try and progress to the next task. The software was motivational and engaged pupils' interest. The pupils were very keen to return to the software to complete further activities and repeat some of the previous tasks. Most pupils grasped the objectives and intentions of the tasks well.

Assessment and pupil tracking opportunities

By selecting the assessment option, the program records the scores and times for each exercise taken during that session. There are no options to save the scores so any data needs to be collected before the session ends. Pupil understanding can be monitored through printing out the score and time it took, though there is no indication of how many attempts generated this. If pupils have selected only a few answers to be given or they have had several attempts the quickest score only is displayed and there is no indication of how many attempts have been made. If pupils choose to only give two answers, the assessment page shows a reduction in the score maximum. Due to the self-correcting facility, pupils should complete maximum scores but it is not possible to tell how many attempts were made.

Progress of each user can be tracked per session, however this is not saveable and any evidence of achievement needs to be printed out. Data tracked refers to the score per concept attempted and the time it took. Pupils should work on one area at a time since if two or three are started before completion, all three area times continue to count. If a child only has to fill in a set number of attempts the maximum score is adjusted on the assessment page, eg. if only two answers are selected the score is out of two, if four answers are selected, the score is out of four, etc. Summary results can be generated and then the teacher would have to compare like attempts with other pupils. When the pupil next works on the activities, no reference can be found to previous attempts so printing and storing records is important for tracking individual progress and understanding. Multiple attempts over a period of time could also indicate improvement and retention of facts and concepts. Again it is only possible keeping printed records following the period of activity.

Special needs

By clicking on the numbers option on the set up menu screen, the teacher can differentiate the number of tasks for selected individuals or groups. For example in materials, if the pupil task is to decide what is flexible and what is rigid, by giving only two or three examples, pupils have better direction as to which category to choose. Similarly, if producing worksheets, choosing word options and a category enables the tasks to be easily and effectively differentiated to a range of abilities.

The good quality speech feature ensures pupils with reading difficulties can access the activities. By holding the mouse over a word, it is spoken. A reverse the activity option and a repeat the task option should ensure pupils who have not understood the concept have a further chance to practice.

Content and design

Schemes of work supported

There are three areas of the Science Key Stage 1 QCA Scheme of Work covered by this software:

Life Processes and Living Things, Physical Processes and Homes / Materials.

Life Processes and Living Things includes activities on alive and not alive, animals and plants, parts of the body, food and diet, alike and not alike, flowering plants and grouping living things.

Homes and Materials includes activities on building a house, types of houses, animal homes and grouping common materials.

Physical Processes includes activities on pushing and pulling, changing shape, changing direction, things that use electricity, simple circuits, light and sound.

Literacy

Clear, audible and 'real' speech is used throughout and children should be taught and encouraged to point the mouse over the words or boxes to reveal an instruction, direction or actual word. The software uses green direction arrows to move back and forward within pages and an open door signals the exit / quit path. A red return arrow is used to reverse the exercise whilst a pictorial menu is constantly displayed to aid instructions for moving around. Pupils need relatively basic reading skills coupled with the ability to follow instructions due to the organisation and structural features. For sorting, a divider line is available which encourages pupils to discuss categorising. To encourage writing, most screens have a link with a writing frame and relevant pictures to aid the task. This can be either written on the screen or printed off. I found that pupils preferred to write on screen and this was motivational and produced good descriptions for the tasks.

Numeracy

There are no specific links to the numeracy strategy and no claims are made by the publishers. If the number option is used for the activities, suggestion is made that the pupils could choose the number of answers to give per exercise.

The exercises are timed and pupils were interested in this. Scores also appear in the top left hand corner in the format of score out of however many questions there are. This again engaged the pupils.

Design and navigation

The software is extremely well organised in terms of layout and navigation is very straightforward. Once you have worked out the number and continue options (I found this confusing at first and needed to experiment) the on screen layout of arrows and repeat options are very straight forward to master. Pictorial clues for exit and home make it simple for young children to use and the pupils found few

difficulties in moving around the activities. All three science areas follow the same format so the same skills transfer to the other scientific aspects covered. There are no save features which would improve the program particularly from the assessment opportunities it offers.

Ease of installation

The software automatically loads when inserted into the CD disc drive. Once installed the program will run without the disk being present.

Support materials

By logging onto www.clicsoft.co.uk, a six-page user guide can be accessed. On the website, there are sample screen shots and full documentations with instructions on how to use the software. The information is simply set out and easy to follow.

Brief instructions on using the software are on the title cover and in the program itself. The full documentation however is published on their website. This allows the authors to update any changes.

Suitable for ages 5, 6, 7

Planning

The software is straightforward to install and very easy to use. Little time is needed to familiarise the teacher with the content and it is extremely easy to navigate through the different activities. Since all three aspects are presented in the same way, it takes little time to develop knowledge of the program. The software can differentiate if the numbers option is selected. The software is ideal for using with a whole class as it generates discussion, and my pupils were eager to interact with the tasks. To monitor pupil understanding, individual use helps to check their understanding of the concepts. Little training is needed for pupils to familiarise themselves with how to use the program.

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