



Product Name	Cabri 3D
Product Manufacturer/Distributor	Cabrilog/Chartwell-Yorke
Unique Identifying Number	1175

Judging Criteria	Judges' Comments
<p>1. To what extent does the product align to UK curricula?</p> <p>When assessing your entry, the judges will expect to find:</p> <ul style="list-style-type: none"> a close match between your product and the National Curriculum for England, the Primary National Strategy and any other relevant national strategies or non-statutory guidelines evidence of a close fit with specific areas of the Key Stage 3 and Key Stage 4 National Curriculum and a clear statement of which areas of the curriculum the product is intended to address. <p>The judges will also take into consideration other relevant benefits and features, such as:</p> <ul style="list-style-type: none"> the ability to address an area of English, mathematics, science or ICT teaching which would normally be difficult to teach cross-curricular potential. 	<ul style="list-style-type: none"> The product aligns closely with the 3-D aspects of the shape, space and measures aspect of the English National Curriculum for mathematics. The product enables materials to be produced to support aspects of the National Curricula in other subjects such as design and technology and science.

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<p>2. To what extent does the product address specific learning objectives and outcomes?</p>	
<p>When assessing your entry, the judges will expect to find:</p> <ul style="list-style-type: none"> • full details of the learning objectives (targets) addressed and the purpose of a particular activity <p>The judges will also take into consideration other relevant benefits and features, such as:</p> <ul style="list-style-type: none"> • evidence of 'added value' in relation to the delivery of a particular objective - for example, transforming texts, transformation geometry, handling data or datalogging • objectives which are attainable, yet sufficiently challenging to ensure that users make progress in their learning • content which is appropriate to the age and stage of the intended user • flexibility (supporting statutory and non-statutory guidelines in relation to structured tasks) and open-endedness (putting learners in control, and enabling them to explore and make decisions) • opportunities for building confidence and self-esteem • accuracy in terms of concepts and the use of vocabulary and terminology. 	<ul style="list-style-type: none"> • The product is a versatile tool for exploring space, and is not directly linked to specific objectives and outcomes – these are for the teacher to decide. • There is a limited amount of support materials, which teachers could use to directly relate the use of the product to the objectives in the Key Stage 3 Framework for mathematics.

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<p>3. To what extent does the product demonstrate ease of use?</p>	
<p>When assessing your entry, judges will expect to find features that provide appropriate robustness and flexibility of design and support for users, such as:</p> <ul style="list-style-type: none"> • an interface and navigation designed to support intuitive use • designs that support user experimentation and minimise the adverse consequences of accidental or unintended actions, for example by providing straightforward error recovery features • context-sensitive help appropriate to the intended users • appropriate assumptions about the ICT skills of users (both learners and practitioners), together with additional support where needed • materials that provide clear guidance for teachers on how to use the product to support learning and teaching practice - for example, guidance on using the product for differentiation. 	<ul style="list-style-type: none"> • The product's user interface is an extension of that used in its 'sister' 2-D product, and so will be familiar to those who already use that software. • For those unfamiliar with 2-D geometry software, the user interface can be quite challenging. • The context-sensitive 'tool help' was perceived as a very useful form of support, as were the tutorial video walk-throughs.

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4. To what extent is the product engaging and motivating?	<ul style="list-style-type: none">• The product enables the user to engage with materials, which are potentially intrinsically engaging and motivating to many.• The immediate visual feedback lets the user know whether or not they are on the right track, and the repeatable 'Undo' feature easily allows errors to be corrected.
<p>When assessing your entry, the judges will look for a range of features, such as:</p> <ul style="list-style-type: none">• product design that offers compelling and enjoyable experiences, and encourages active participation• effective feedback mechanisms that foster learner interest - particularly if they are challenging and appropriate to the user• approaches which offer interesting and relevant situations to the target audience• ways of using the product in conjunction with other resources or activities• appropriate use of digital assets - for example, digital images (both still and moving), electronic texts (which can be explored in a variety of ways), dynamic graphs and other animated images.	

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<p data-bbox="111 313 1050 386">5. To what extent does the product support effective teaching and learning styles?</p> <p data-bbox="111 431 1125 493">When assessing your entry, the judges will look for a range of features, such as:</p> <ul data-bbox="111 537 1125 1154" style="list-style-type: none"> <li data-bbox="111 537 1125 740">• a product which addresses a good balance of the main learning styles, which most practitioners agree are: <ul data-bbox="159 607 506 740" style="list-style-type: none"> <li data-bbox="159 607 428 634">▪ visual and verbal <li data-bbox="159 639 485 667">▪ visual and non-verbal <li data-bbox="159 672 506 699">▪ tactile and kinaesthetic <li data-bbox="159 704 457 732">▪ auditory and verbal <li data-bbox="111 781 1125 841">• encouragement of exploration, investigation, collaboration, and extension activities <li data-bbox="111 846 1125 943">• a product which, rather than focusing solely on learning goals, provides challenges for learners to move on by themselves and so develop their practice <li data-bbox="111 948 1125 976">• support for work by the whole class, small groups and individual learners <li data-bbox="111 980 590 1008">• options for peer-to-peer activities <li data-bbox="111 1013 1125 1073">• help with practitioners' planning and delivery - for example, by providing support for focused practical tasks by learners <li data-bbox="111 1078 1031 1154">• teacher notes that indicate different pedagogical ways of using the product. 	<ul data-bbox="1146 399 1885 1008" style="list-style-type: none"> <li data-bbox="1146 399 1885 553">• The product is, of course, very visual. The range of features allows for a wide variety of tasks to be undertaken at a variety of levels and styles of class management. <li data-bbox="1146 607 1885 761">• As yet, the accompanying resources to support its classroom use by teachers and pupils in mathematics and in other subjects is are somewhat limited. <li data-bbox="1146 815 1885 1008">• The software allows learners to set their own targets and is ideal for use to support personalised learning by the teacher or student devising tasks or being set challenges, objects to construct, different ways of building/linking objects, and so forth.

The judges will also look for features that support personalised learning, such as:

- opportunities to tailor content to meet the needs of individual learners for example, by providing different versions of content, or offering tasks which accommodate different learners' requirements
- the ability to track learners' progress, either by following their activities or by reporting on tasks which are assessed
- opportunities for learners to apply learning to other situations which reflect their own context
- opportunities for practitioners to adapt the product to suit different learners' preferences and ability levels, and to offer differentiation.

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<p>6. Does the product support the development of thinking skills?</p>	
<p>Using thinking skills, pupils learn how to learn - to 'know how' as well as 'know what'.</p> <p>When assessing your entry, the judges will look for a range of features, such as:</p> <ul style="list-style-type: none"> • resources which offer pupils clear tasks and support with opportunities to: <ul style="list-style-type: none"> ○ develop understanding, and represent the problem or task they have been set ○ construct and organise a plan of action ○ gather and organise relevant information ○ test hypotheses, make decisions and solve problems • tasks which have meaning for the learners, and engage them with the content of the software rather than its interface • for paired or group work at the computer, opportunities for discussion which stimulate the giving of reasoned opinions on the task or subject in hand • activities which offer scaffolding, with support for the task in the early stages giving way to greater opportunities for the learner to take control and autonomy over time. 	<ul style="list-style-type: none"> • Users have to learn to use the correct vocabulary concerned with 3-D mathematics when choosing among the available tools. • In order to apply the tools strategically to tackle a given task, users have to engage with sophisticated forms of geometrical reasoning. • This application of 3-D geometric reasoning to problem-solving is greatly enhanced when pupils and teachers engage in a dialogue in which they try to verbalise their next steps and reasons for them.

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<p>7. Does the product facilitate innovative use?</p>	
<p>When assessing your entry, the judges will look for a range of features, such as:</p> <ul style="list-style-type: none"> • evidence of where technology has been used appropriately to increase learners' self-awareness and confidence • examples showing how ICT can enable practitioners to adapt their teaching in creative ways • opportunities for practitioners and learners to use the product in open and enterprising ways. 	<ul style="list-style-type: none"> • The software is in itself extremely innovative, and addresses aspects of the curriculum, which are very difficult to teach. • It provides opportunities for learners to engage in open-ended activities and develop innovative approaches. • The product enables developers to embed manipulatives developed in Cabri 3D within MS Office products and web pages which can be readily accessed and manipulated by users who have installed the appropriate, free, drivers.

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<p>8. To what extent does the information provided by the referee institution exemplify how well the product has met the specific needs of the institution?</p>	
<ul style="list-style-type: none"> • evidence that the product has supported learning, teaching or management • insight into how the product will meet their changing needs in the future - this future-gazing aspect of innovation is vital for the support of personalised learning • genuine contribution to improving teaching, raising standards and making learning personal and compelling for every student • the best products will offer excellence and equity, support leaders and practitioners in their role, and contribute to learners taking greater control of their learning 	<ul style="list-style-type: none"> • The school has used the software in the Design and Technology department and run sessions to get feedback from teachers in science, mathematics and geography departments. • Subject areas were generally enthusiastic about the potential of this new tool to help students visualise and model in three dimensions.

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9. To what extent does the product provide opportunities for promoting creativity?	
<p>When assessing your entry, the judges will look for a range of features, such as:</p> <ul style="list-style-type: none">• opportunities for stimulating imaginative learning and teaching• opportunities for taking risks and making mistakes in a non-threatening environment• opportunities and support for exploring and reflecting on materials, information and ideas• the means for learners to express their understanding and knowledge of learning objectives in creative ways.	

- The software is completely open and provides excellent opportunities for learners to show creativity in designing and manipulating 3-D configurations.

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10 To what extent is the product cost-effective?	
<ul style="list-style-type: none">• rate the cost-effectiveness of the product according to the price stated on the entry form. Judge this in terms of educational aims and results, not just price.• value for money (if you are aware of the cost of similar products, how does this compare?)	<ul style="list-style-type: none">• It is very good value for money.

Additional Feedback for Developer

- It addresses an aspect of the school curriculum that is notoriously hard to teach.
- It provides a rich range of features to enable the exploration of space and to help users to develop their powers of visualisation and modelling.
- It supports developers in producing learning objects to support teachers and learners in a range of disciplines, and to engage and motivate students in the important areas of science, technology, engineering and mathematics.