

# 2014 HSC Information and Digital Technology Digital Animation Marking Guidelines

## Section I

### Multiple-choice Answer Key

Question	Answer
1	B
2	A
3	D
4	A
5	D
6	B
7	C
8	D
9	C
10	D
11	A
12	A
13	C
14	B
15	C
16	B
17	C
18	A
19	D
20	D

## Section II

### Question 21 (a)

Criteria	Marks
• Provides a full explanation as to why power leads are tagged	2
• Provides some relevant information	1

*Sample answer:*

To indicate that they are tested and are ready to use. Tags also record the date when it was tested.

### Question 21 (b)

Criteria	Marks
• Shows a thorough understanding of how a workstation can be set up to minimise neck, back and wrist pain	4
• Shows a sound understanding of how a workstation can be set up to minimise neck and back pain OR neck and wrist pain OR back and wrist pain	3
• Shows some understanding of how a workstation can be set up to minimise neck and/or back and/or wrist pain	2
• Identifies an ergonomic feature of a workstation	1

*Sample answer:*

The chair should be adjustable and have a back support. It should be at a height that enables the user to have their feet flat on the floor, their elbows at 90 degrees and their knees at 90 degrees. The desk should be at a height that enables the user to have their wrists straight. A wrist support should be used when not typing. The mouse should be placed as close to the keyboard as possible. The top of the monitor should be just below eye level and at about an arm's length from the user. Monitor at arm's length away.

**Question 22 (a)**

Criteria	Marks
• Correctly identifies TWO key features that make BullsEye OS open source	2
• Correctly identifies a feature that makes BullsEye OS open source	1

**Sample answer:**

The source code is available free of charge and the code is available for public use.

**Answers could include:**

The code may be modified.

**Question 22 (b)**

Criteria	Marks
• Provides a suitable procedure	2
• Provides some relevant information	1

**Sample answer:**

The specifications should be checked. The image needs to be downloaded and expanded to a bootable media. The installation can then be completed from the bootable media.

**Question 23 (a)**

Criteria	Marks
• Provides a reason as to why it is unnecessary to run a disk defragmenting utility for a solid state drive	1

**Sample answer:**

Because a solid state drive stores data differently to a hard disk drive. The files are always written contiguously.

**Question 23 (b)**

<b>Criteria</b>	<b>Marks</b>
• Identifies the most efficient procedure and provides reasons for the choice, showing thorough understanding of full, differential and incremental backups	4
• Attempts a procedure and shows a sound understanding of full backup and/or incremental backup	3
• Shows some understanding of full and/or differential and/or incremental backup	2
• Provides some relevant spreadsheet information	1

***Sample answer:***

1. Restore all data from 131003–A and 131003–B from the latest full backup. Both media need to be stored in order (A first then B) as the data is written across both media starting with A.
2. Restore all data from 131008–A to the same location as the full backup. Because this is a differential backup, it has all the changes since the last full backup.
3. Restore all data from 131009–A to the same location as the full backup. Because this is an incremental backup, it has all changes since the last backup.

**Question 24 (a)**

Criteria	Marks
• Shows understanding of the effects of squashing and stretching and the impact on the animation	2
• Shows a basic understanding of animation	1

**Sample answer:**

The purpose is to give a sense of lifelike movement. If the object is stretched in one dimension it must be contracted in the other dimension.

**Question 24 (b)**

Criteria	Marks
• Describes skills that an instructional designer needs showing thorough understanding of working in a production team	4
• Outlines skills that an instructional designer needs	3
• Identifies skills that an instructional designer needs OR • Elaborates on a skill that an instructional designer needs	2
• Shows a basic understanding of the role/skills required of an instructional designer	1

**Sample answer:**

An instructional designer must be able to consult with the client to obtain their requirements before starting a project. They must collaborate with other specialists and work as part of the team developing the product for the client. The instructional designer must be able to plan the steps of a procedure in a logical order to make sure the final product is in the correct sequence.

**Question 25 (a)**

Criteria	Marks
• Correctly outlines a difference	1

**Sample answer:**

3D has depth which makes the animation more real than 2D.

**Question 25 (b)**

Criteria	Marks
• Shows how perspective can be introduced into the sequence	2
• Provides some relevant information	1

**Sample answer:**

Perspective can be added by including another object to show the depth or distance, such as a small tree in the background.

**Question 25 (c)**

Criteria	Marks
• Describes in detail the creative principles	6
• Outlines a range of creative principles and/or provides a detailed description of two creative principles	4–5
• Identifies creative principles and/or outlines creative principle(s)	2–3
• Shows a basic understanding of creative principles or the production of the digital animated sequence	1

**Sample answer:**

Creative principles of anticipation, staging, exaggeration, timing.

Anticipation has been used to prepare the audience for the action of the ball hitting the apple to make the action appear more realistic, ie the expression of angst on the face. Staging has directed the audience's attention to the focus, ie apple and ball plus the use of light and shadow to give the image some 3D quality. Exaggeration is altering the apple's appearance to show hurt once the ball hits. Timing is important here as there are only three frames to tell the story – 'short and sweet'. More frames may have helped tell the story and would have aided in showing what happened after the ball hit the apple but space was limited, and this was not needed for this exercise. Timing is critical for establishing a character's mood and reaction.

**Answers could include:**

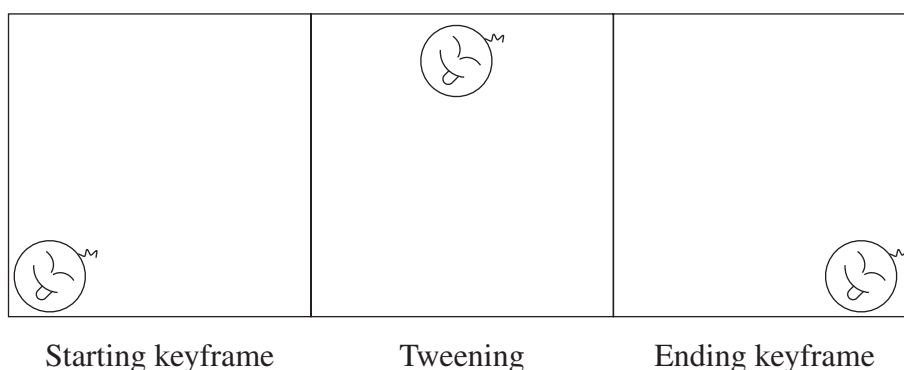
- Secondary action
- Solid drawing
- Appeal
- Arcs

### Section III

#### Question 26 (a)

Criteria	Marks
<ul style="list-style-type: none"> <li>• Produces a series of basic line sketches showing the movement of the sun from sunrise to sunset</li> <li>• Clearly shows the path</li> <li>• Labels all relevant features</li> </ul>	3
<ul style="list-style-type: none"> <li>• Produces sketch(es) showing some features of the movement of the sun</li> </ul>	2
<ul style="list-style-type: none"> <li>• Shows a basic understanding of line sketches</li> </ul>	1

*Sample answer:*



#### Question 26 (b)

Criteria	Marks
<ul style="list-style-type: none"> <li>• Provides an explanation as to how the use of transitions between scenes can enhance an animated sequence</li> </ul>	4
<ul style="list-style-type: none"> <li>• Outlines how transitions can be used between scenes</li> </ul>	3
<ul style="list-style-type: none"> <li>• Identifies features of transitions</li> </ul> OR <ul style="list-style-type: none"> <li>• Outlines a feature of transition</li> </ul> OR <ul style="list-style-type: none"> <li>• Outlines one way that transition can be applied between scenes</li> </ul>	2
<ul style="list-style-type: none"> <li>• Shows a basic understanding of transitions</li> </ul>	1

*Sample answer:*

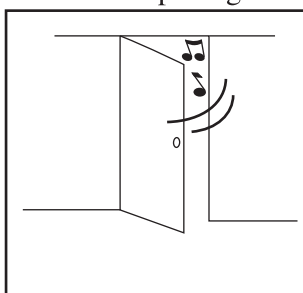
Good transition enhances the user experience as it uses visual as well as audio. It also makes the animated sequence more natural and more engaging by creating a natural flow between two unrelated scenes. Poor transitions can distract people creating a stilted and over-stimulating feel. Transition is an effective way to communicate information visually that would otherwise require text to explain.

**Question 26 (c)**

Criteria	Marks
<ul style="list-style-type: none"> <li>• Produces a storyboard with at least four scenes that addresses the requirements of the scenario</li> <li>• Clearly indicates main features</li> </ul>	8
<ul style="list-style-type: none"> <li>• Produces a storyboard with at least four scenes that addresses most of the requirements of the scenario</li> <li>• Indicates some main features</li> </ul>	7
<ul style="list-style-type: none"> <li>• Produces a storyboard with at least four scenes that addresses the majority of the requirements of the scenario</li> <li>• Indicates some features</li> </ul>	5–6
<ul style="list-style-type: none"> <li>• Produces a storyboard that addresses some requirements of the scenario</li> </ul>	3–4
<ul style="list-style-type: none"> <li>• Produces a scene with at least one relevant feature</li> </ul>	2
<ul style="list-style-type: none"> <li>• Shows a basic understanding of storyboard</li> </ul>	1

**Sample answer:**


– Opening the door



Comes to front door. Loud music playing inside. Background colour light blue.

Drawing of an opening door


Scene 2 – Coming into the house



I walk through front door and come to foyer. Music getting louder.

Drawing of a girl looking at main room.


– Look at all the people



I enter the main room of house and say ‘WOW look at all the people – great party.’ Music even louder.

Clos

Scene 4 – It’s party time



**Answers could include:**

The storyboard could include action, dialogue, relevant music and characters.



## Section IV

### Question 27

Criteria	Marks
<ul style="list-style-type: none"> <li>• Addresses all components of the question</li> <li>• Provides a cohesive well-reasoned response that reflects a high level of organisation, judgement, synthesis and problem-solving skills</li> <li>• Demonstrates an in-depth understanding of ICT functions with reference to the scenario used in the question</li> <li>• Consistently uses precise ICT terminology to a professional level</li> </ul>	13–15
<ul style="list-style-type: none"> <li>• Addresses most components of the question</li> <li>• Provides a cohesive well-reasoned response showing significant organisational and problem-solving skills</li> <li>• Demonstrates a detailed understanding of ICT functions with reference to the scenario used in the question</li> <li>• Uses precise ICT terminology to a level acceptable in industry</li> </ul>	10–12
<ul style="list-style-type: none"> <li>• Addresses most components of the question</li> <li>• Provides a response displaying sound organisational and problem-solving skills</li> <li>• Demonstrates a sound understanding of ICT functions with limited reference to the scenario used in the question</li> <li>• Uses relevant ICT terminology</li> </ul>	7–9
<ul style="list-style-type: none"> <li>• Addresses some components of the question</li> <li>• Provides a response displaying some organisational and problem-solving skills</li> <li>• Demonstrates some understanding of ICT functions</li> </ul>	4–6
<ul style="list-style-type: none"> <li>• Addresses minimal components of the question</li> <li>• Provides a response displaying basic organisation</li> <li>• Demonstrates a basic understanding of ICT functions</li> </ul>	1–3

***Sample answer:***

There are a number of communication methods that can be used by the university. Lessons can be produced on podcasts that include both visual and audio information. Students can view the podcasts in their own time, but still get exactly the same information as all the other students in their class. Podcasts can be used as a reference to review information many times. Students can stop and replay important parts of the podcast as many times as they wish.

Chat sessions allow students to work in groups and have real-time communication with other students in their group. They can also have real-time individual or group access to their lecturers to obtain feedback and answers to questions. Chat sessions can be used to brainstorm ideas for group projects and a record of the session can be saved for future reference.

Videoconferencing is another method of communication for students to view lessons or work in groups. Although these conferences must be viewed in real-time it is a more personalised method of working in groups than chat because students can see each other and information can be displayed on the screen for students to view. Videoconferences can also provide a sense of community for the students and lecturer.

Emails are a method of sending the same information to a group of students at the same time. Information can be viewed by each student at different times when it is convenient for them. Emails can also contain attached documents including text documents, images and recordings. Emails are an extremely common method of communication and can be accessed wherever an internet connection is available.

Mobile phones are a common communication device that most students own. They can be used for text messages as well as phone calls. The university can automatically send text messages to groups of students depending on different criteria, for example to remind students to pay fees. Mobile phones are highly portable with wide coverage over most of Australia. They can also be used to access the internet and emails.

Blogs and Wikispaces are two communication methods that are commonly used to collaborate within a group environment. Blogs allow short messages, brainstorming, just the facts to be viewed by students and lecturers at their convenience. Wikispaces allow students and lecturers to collaborate on the same document in their own time.

Work can be submitted by attaching files to emails, uploading to a website or wiki. Work can also be in the form of a discussion forum.

All these communication methods could be used by students and lecturers at the university. Using a number of different methods would allow each student to choose the methods that best suit them and methods with which they are most comfortable.

# Information and Digital Technology

## Digital Animation

### 2014 HSC Examination Mapping Grid

#### Section I

Question	Marks	HSC content – focus area	Employability skills (Please put an X where appropriate)							
			Communication	Teamwork	Problem-solving	Initiative and enterprise	Planning and organising	Self-management	Learning	Technology
1	1	Operating System Software – Operating systems – page 28								X
2	1	Safety – WHS information – page 39	X				X			
3	1	Operating System Software – Installing an operating system – page 29			X				X	X
4	1	Working in the Industry – Communication – page 26	X			X		X		
5	1	Diagnostic Testing – Troubleshooting – page 32			X				X	X
6	1	Diagnostic Testing – Destructive & malicious software protection – page 33	X		X		X		X	X
7	1	Safety – Risk management – page 37	X	X	X	X	X		X	
8	1	Working in the Industry – Employment – page 24	X	X	X	X	X	X	X	X
9	1	Operating System Software – Installing an operating system – page 29	X		X	X	X		X	X
10	1	Safety – Risk management – page 37	X	X	X	X	X		X	
11	1	Digital Animation – Digital animation – page 55			X					X
12	1	Digital Animation – Animation techniques – pages 57–58							X	X
13	1	Digital Animation – Planning a digital animation sequence – page 57	X		X		X			
14	1	Digital Animation – Creative principles – pages 55–56			X				X	X

Question	Marks	HSC content – focus area	Employability skills (Please put an X where appropriate)							
			Communication	Teamwork	Problem-solving	Initiative and enterprise	Planning and organising	Self-management	Learning	Technology
15	1	Digital Animation – Planning a digital animation sequence – page 57 Producing a digital animated sequence – page 57			X		X			X
16	1	Digital Animation – Producing a digital animated sequence – page 57	X		X					X
17	1	Digital Animation – Digital animation – page 55	X						X	
18	1	Digital Animation – Tools – page 55			X	X	X			X
19	1	Digital Animation techniques – page 55					X			X
20	1	Digital Animation – animation techniques – Dot Point 3 – page 55			X		X		X	X

**Section II**

Question	Marks	HSC content – focus area	Employability skills (Please put an X where appropriate)							
			Communication	Teamwork	Problem-solving	Initiative and enterprise	Planning and organising	Self-management	Learning	Technology
21 (a)	2	Safety – Safe work practices – page 38	X	X	X	X	X		X	
21 (b)	4	Safety – Safe work practices – page 38	X	X	X	X	X		X	
22 (a)	2	Operating System Software – Operating systems – page 28	X		X	X	X		X	X
22 (b)	2	Operating System Software – Installing an operating system – page 29	X		X	X	X		X	X
23 (a)	1	Diagnostic Testing – Troubleshooting – page 32	X		X		X			X
23 (b)	4	Diagnostic Testing – Preventative maintenance – page 33	X		X		X			X
24 (a)	2	Digital Animation – Creative principles – page 56			X					X
24 (b)	4	Digital Animation – planning a digital animation sequence – page 56				X	X	X		

Question	Marks	HSC content – focus area	Employability skills (Please put an X where appropriate)							
			Communication	Teamwork	Problem-solving	Initiative and enterprise	Planning and organising	Self-management	Learning	Technology
25 (a)	1	Digital Animation – Digital animation – page 56			X				X	
25 (b)	2	Digital Animation – Creative principles – page 56					X		X	X
25 (c)	6	Digital Animation – Creative principles – page 56	X		X		X			X

**Section III**

Question	Marks	HSC content – focus area	Employability skills (Please put an X where appropriate)							
			Communication	Teamwork	Problem-solving	Initiative and enterprise	Planning and organising	Self-management	Learning	Technology
26 (a)	3	Digital Animation – Producing a digital animation sequence – page 57			X		X		X	
26 (b)	4	Digital Animation – Producing a digital animation sequence – page 57	X		X			X		
26 (c)	8	Digital Animation – Planning a digital animation sequence – Dot Point 3 – page 57 Producing a digital animation sequence – Dot Point 1 – page 57	X	X	X	X	X	X	X	X

**Section IV**

Question	Marks	HSC content – focus area	Employability skills (Please put an X where appropriate)							
			Communication	Teamwork	Problem-solving	Initiative and enterprise	Planning and organising	Self-management	Learning	Technology
27	15	Working in the Industry – Nature of industry, communication – pages 24 & 26	X	X	X	X	X	X	X	X