

Write your name here

Surname

Other names

Centre Number

Candidate Number

**Edexcel GCSE**

# Information and Communication Technology

## Unit 3: Exploring Digital Design

Wednesday 13 June 2012 – Afternoon  
**Time: 1 hour 30 minutes**

Paper Reference  
**5IT03/01**

**You do not need any other materials.**

Total Marks

### Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided  
– *there may be more space than you need.*

### Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets  
– *use this as a guide as to how much time to spend on each question.*
- Questions labelled with an **asterisk** (\*) are ones where the quality of your written communication will be assessed  
– *you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.*

### Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

P40765RA

©2012 Pearson Education Ltd.

6/6/1/1/5

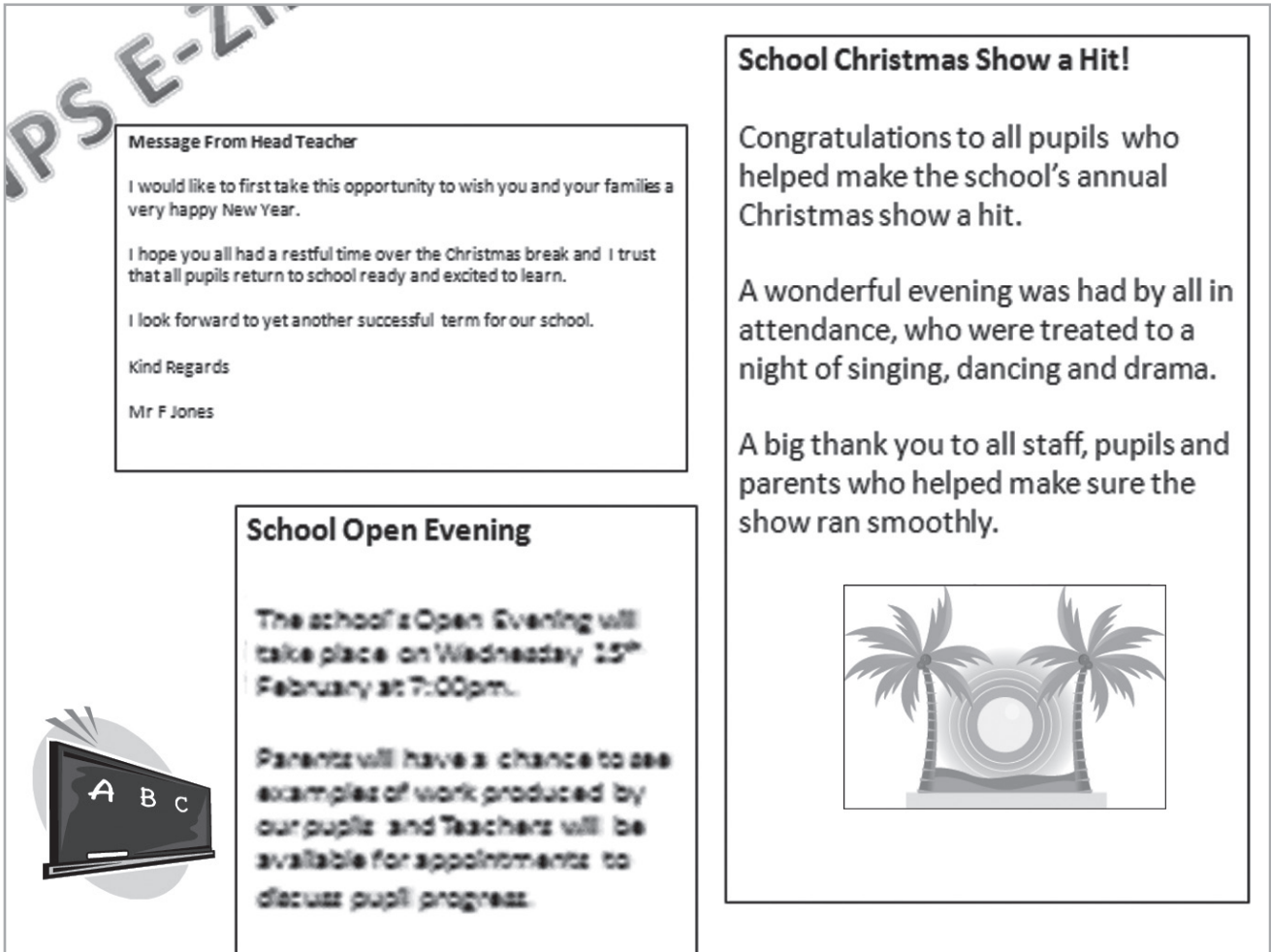


**PEARSON**

**Answer ALL questions. Write your answers in the space provided.**

Frank is the Head Teacher of Nook Primary School. He has employed Asrah to help the school develop the digital products they use.

**Figure 1** shows the first draft of the school e-zine.



**Figure 1**



Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

1 The school uses a wide range of digital products for different purposes.

(a) This table lists some of the digital products the school uses.

What is the **main** purpose of each product?

(4)

Product	To inform	To entertain	To educate	To advertise
Email to parents about an increase in the cost of school dinners.	☒	☒	☒	☒
Digital poster about the sale of tickets for a school disco.	☒	☒	☒	☒
Digital teaching materials.	☒	☒	☒	☒
A video of last month's school show.	☒	☒	☒	☒

(b) **Figure 1** shows the first draft of the school e-zine.

Frank notices that some text is blurred. It needs to be changed.

Identify **three** other changes that would improve the first draft of the e-zine.

(3)

- 1 .....
- 2 .....
- 3 .....



(c) Frank wants Asrah to redesign the school's website.

(i) Name **two** types of design documentation that Asrah could use.

(2)

1 .....

2 .....

(ii) Asrah has designed a new school logo. She has also identified the font styles, sizes and colours to be used in Nook Primary School's digital products.

What is the correct term for this?

(1)

- A** Format
- B** House style
- C** Mock-up
- D** Design sheet

(d) During development of the website, Asrah uses a template file. She uses this to add the school logo to the top of every page.

(i) State **two** other things the template file might add or apply to every page.

(2)

1 .....

2 .....

(ii) Explain **one** benefit of using a template file.

(2)

.....

.....

.....

.....

**(Total for Question 1 = 14 marks)**



**BLANK PAGE**

**Question 2 starts on the next page.**



2 Asrah is producing a digital poster for Nook Primary School's Open Evening.

Figure 2 shows Asrah's storyboard for her poster.

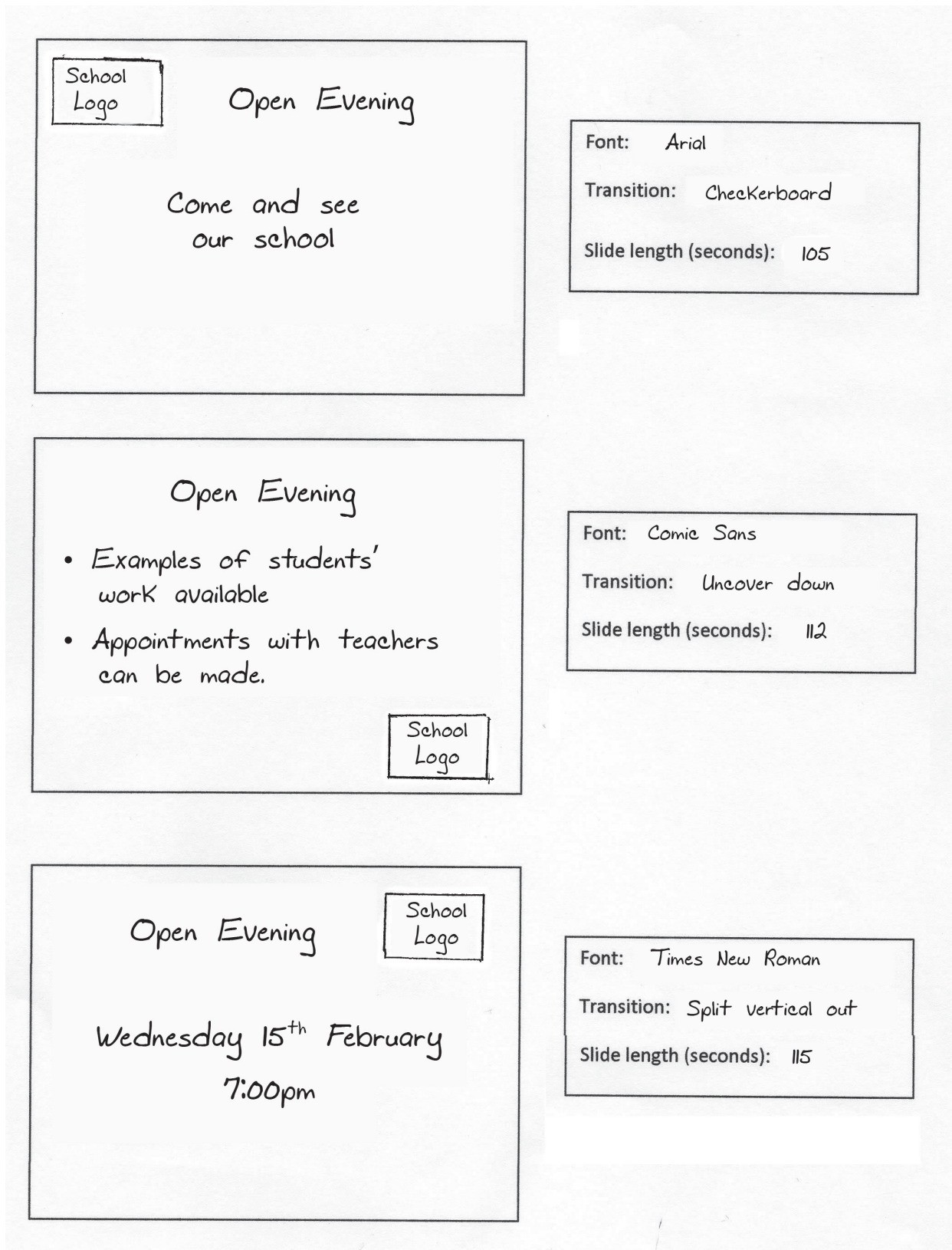


Figure 2



(a) The design in **Figure 2** is inconsistent and has a number of features that make it not fit for purpose.

(i) Asrah is redrafting her storyboard. It is not yet finished.

Complete the storyboard in **Figure 3**.

Ensure that the design is consistent throughout. It should be suitable for use as a digital poster.

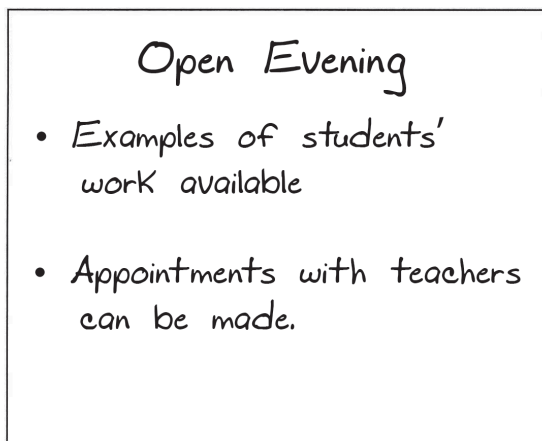
(5)



Font:

Transition:

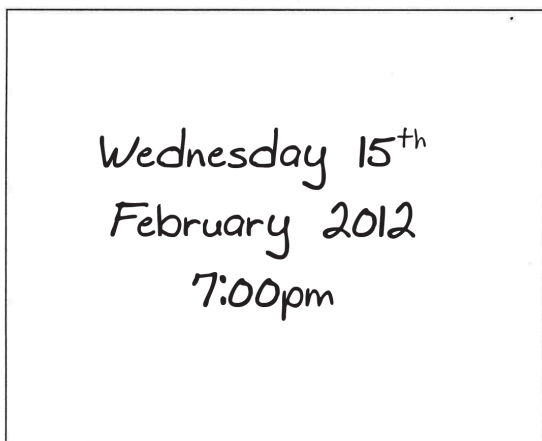
Slide length (seconds):



Font:

Transition:

Slide length (seconds):



Font:

Transition:

Slide length (seconds):

**Figure 3**



(ii) Identify **two** design details that are missing from Asrah's storyboard.

(2)

1 .....

.....

2 .....

.....

(b) The digital poster will be displayed on a large screen in the reception area of the school.

Asrah has decided not to include sound.

Give **one** reason for this.

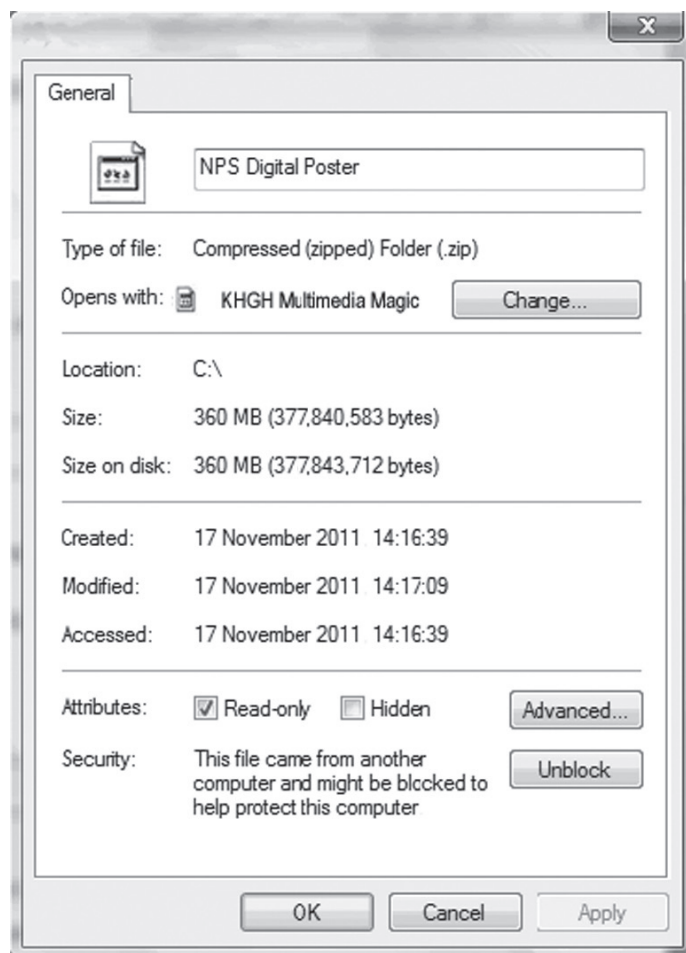
(1)

.....

.....

(c) Frank wants to see a copy of the poster.

These are the 'general' properties of the poster file.





- (i) Asrah gives Frank a copy of the file on CD. He is unable to view the poster on his PC.

Explain why the properties of this file might be causing this problem.

(2)

.....

.....

.....

.....

- (ii) The properties show that the file is read-only.

Give **one** reason why Asrah might have done this.

(1)

.....

.....

- (d) Asrah has reduced the file size of some of the images she has used in the poster.

- (i) State the term for this.

(1)

.....

- (ii) Explain **one** advantage of reducing the file size of assets used in the poster.

(2)

.....

.....

.....

.....

**(Total for Question 2 = 14 marks)**



3 Asrah has created a database to store details of pupils who attend after school clubs.

This is a data entry form for the database. It will be used by staff.

# NPS After School Clubs Database

Name:	<input style="width: 60%;" type="text"/>
Year Group:	<input style="width: 40%;" type="text"/>
Date of Birth:	<input style="width: 40%;" type="text"/>
After School Club:	<input style="width: 60%;" type="text"/>

(a) Give **two** features Asrah could use on the form to make it easier to enter data.

(2)

1 .....

.....

2 .....

.....



(b) Asrah tests the database as she develops it. She gets feedback from test users.

(i) Give **one** characteristic of a suitable test user.

(1)

.....

.....

(ii) Asrah produces a test plan.

This is part of Asrah's test plan.

Description of test	Test data
Testing 'Name' field	Rashad Hussain
Testing 'Name' field	EVAN JONES

She has not included a column for the test number.

Give **three** other column headings that Asrah should include.

(3)

1 .....

2 .....

3 .....

(iii) This is some of the test data that Asrah is using to test the 'Year Group' field in the data entry form.

-4, 6, 5, 4, 3, 2, 1, 8, 7, 0, 11, 100

Explain why she has chosen this data to test the 'Year Group' field.

(2)

.....

.....

.....

.....



(c) Frank wants a menu screen as part of the interface for the database.

This is the design specification he has given to Asrah.

**Product:** NPS After School Clubs Database

**Section:** Main Menu

**Main Menu Content Requirements:**

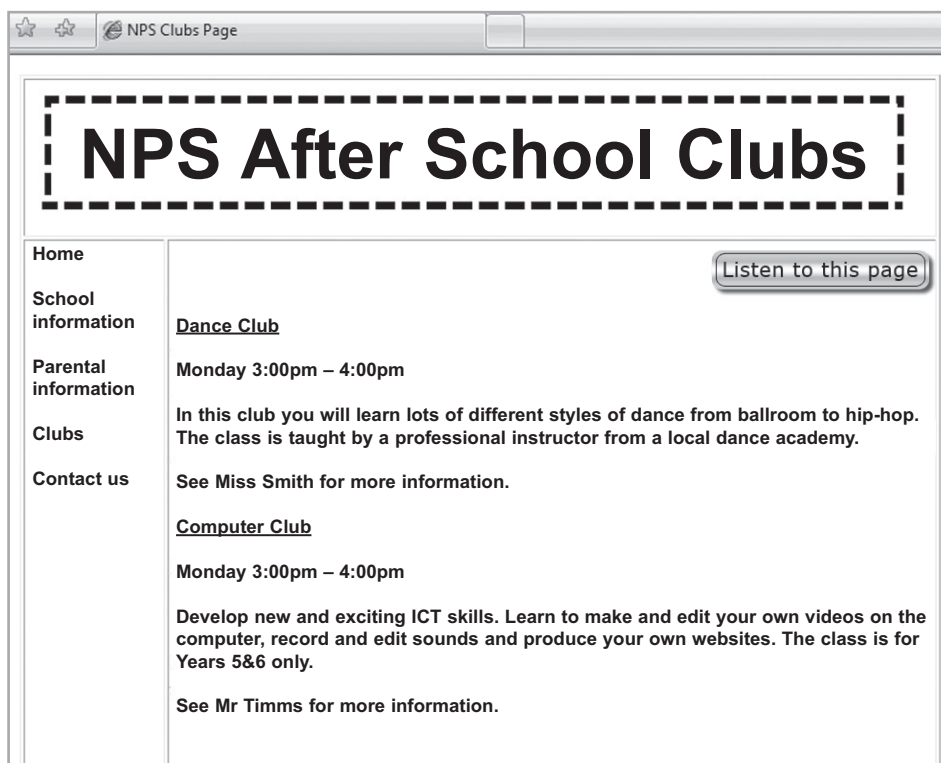
- Product name
- Screen title
- Navigation buttons
  - Add/Edit pupil
  - Add/Edit club
  - Find pupil/club

Use the space provided to sketch a suitable design for the main menu.

(4)



(d) Asrah has put a page on the school website with information about after school clubs.



(i) Asrah has added a 'listen to this page' accessibility feature to the page.

Give **one** reason for doing this.

(1)

.....

.....

(ii) State **three** other design features that Asrah could use to make the page accessible to children under 11 years old.

(3)

1 .....

.....

2 .....

.....

3 .....

.....

(Total for Question 3 = 16 marks)



**4** Frank wants a 'virtual tour' of the school on the website to allow users to see the school in action.

The 'virtual tour' will be a multimedia product.

(a) (i) Give **one** reason why the 'virtual tour' should be easy to use.

(1)

.....

.....

(ii) Describe **one** method Asrah could use to gather information and ideas for the content of the 'virtual tour'.

(3)

.....

.....

.....

.....

.....

.....

.....



(b) The 'virtual tour' will be a multimedia product showcasing Nook Primary School in action.

Give an example of how each of these features could be used in the 'virtual tour'.

Use a different example for each feature.

(4)

Feature	Example use
Animation	
Images	
Video	
Sound	

(c) A video advising parents about healthy eating has been made available on the school website.

(i) State **two** methods parents might use to watch this video.

(2)

1 .....

2 .....

(ii) Parents will need to use a codec to view the video.

Explain what a codec is.

(2)

.....  
.....  
.....  
.....



**\*(d) Asrah must test the 'virtual tour' to ensure it works as intended.**

The 'virtual tour' must be easy-to-use and informative.

Using the context of the 'virtual tour', describe the processes Asrah must follow to ensure a full and thorough test.

**(6)**

*(This area contains numerous horizontal dotted lines for the student to write their answer.)*

**(Total for Question 4 = 18 marks)**





**BLANK PAGE**

**Question 5 starts on the next page.**



5 Frank wants Asrah to create an e-learning package to teach pupils about different countries.

This is the first version of one of the pages from the e-learning package.

Germany

Close X

HOME

Click to play video

Germany is a large country in Europe made up of 16 states.

Size: 357,021 km

Population: 81 m

Currency: Euro

Capital: Berlin

100 EURO

Map of Germany

Click the hyperlink for more information about Germany:

<http://www.germany-tourism.de/>

The German Flag

Click to enlarge

Castle Blankenberg In Engehausen

France

Poland

(a) (i) One of the interactive features used on the page is a 'rollover' effect on the Currency text.

Give **two** other interactive features on this page.

(2)

1 .....

2 .....



(ii) Give **one** design feature of the page that is **not** interactive.

(1)

(iii) The e-learning package will teach pupils some words from each country. The words will be part of the **narration** for a slide show. The package will also include a quiz.

State **one** other type of audio that could be used in the e-learning package and give an example of its use.

(2)

Type of audio

Example of use

(b) Asrah saves her work regularly.

When she makes a big change she alters her file names by 1.

eg *elearningv1.0, elearningv2.0* etc.

When she makes small changes she alters her file names by 0.1

eg *elearningv1.1, elearningv1.2* etc.

Give the term for this.

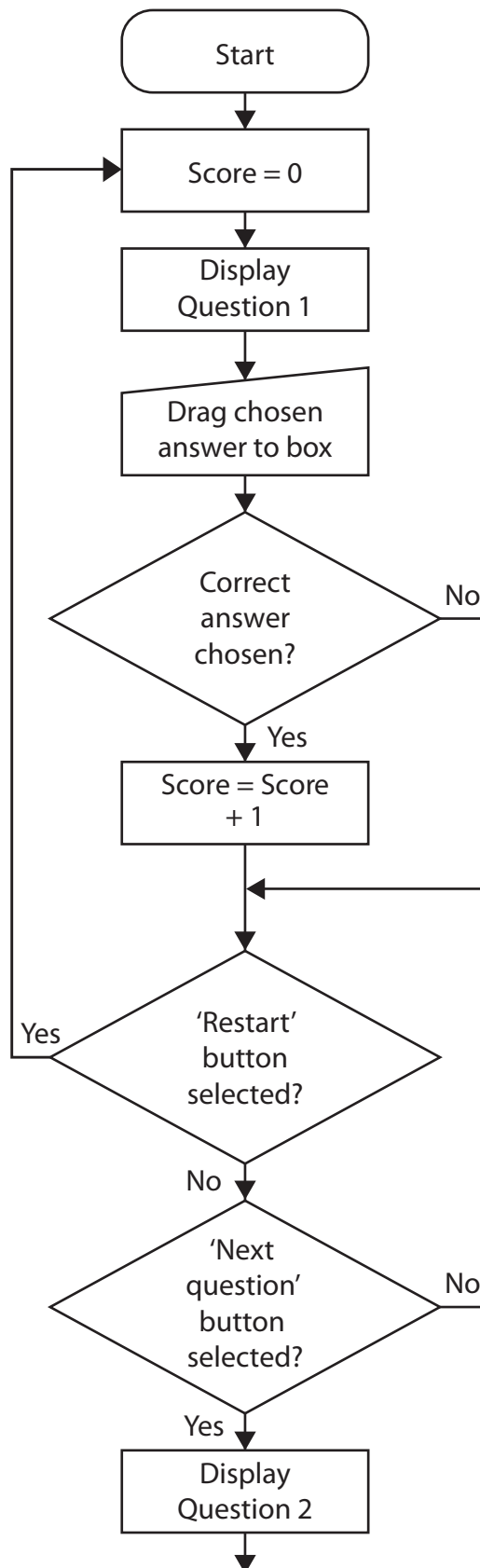
(1)



(c) The e-learning package has a quiz at the end of each topic.

Asrah has used a flowchart to plan the quiz.

This is part of Asrah's flowchart.



(i) Asrah has started to create a page for the quiz section using the flowchart.

Sketch **two** things on to the page that she has not yet added.

(2)

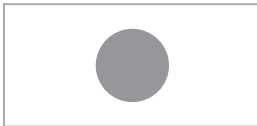


HOME

# Flags Quiz

## Question 1

Which country does this flag belong to?



Drag your answer here

Drag your answer to the box

**France**

**Japan**

**Germany**

**China**



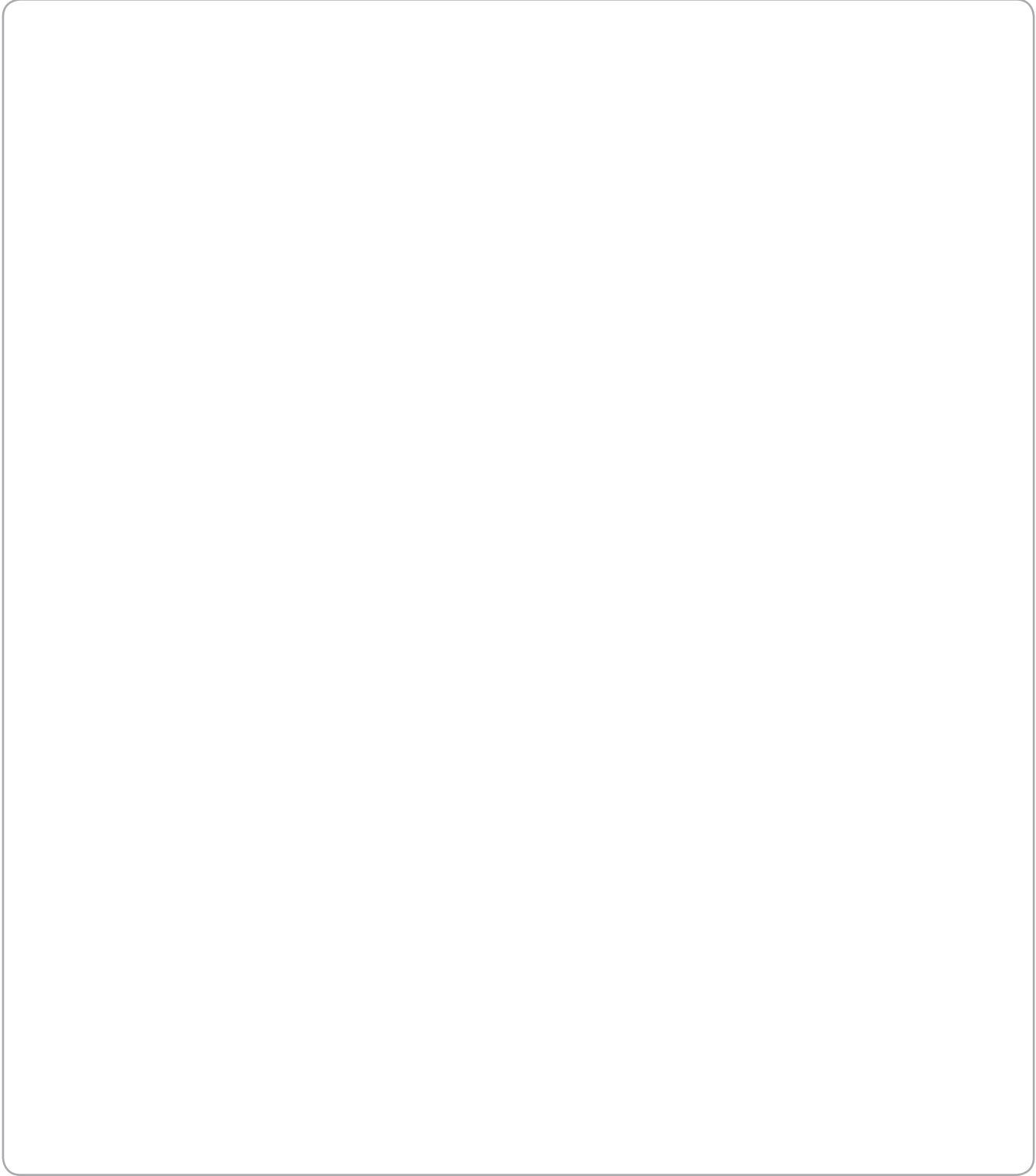
P 4 0 7 6 5 R A 0 2 1 2 4

(ii) Asrah is creating another flowchart. The flowchart should show what happens at the end of the quiz. It must do the following:

- check if the score is a 'high score'
- if yes, prompt player to enter name and then go to 'high score' table
- if not go straight to 'high score' table.

Use this space to draw how this flowchart might look.

(4)



\* (d) When developing the e-learning package Asrah creates her own assets.

Evaluate the impact of creating her own assets and other methods of gathering and preparing digital content.

(6)

A series of horizontal dotted lines provided for writing the answer to the question.

**(Total for Question 5 = 18 marks)**

**TOTAL FOR PAPER = 80 MARKS**



**BLANK PAGE**

