

**Cycle 1 Homework**

**September 2019**

**Subject:**

**Computer Science**

**Year 10**

This cycle you will be learning: The purpose and content of pre-production documents.

|  |  |
| --- | --- |
| **What you will learn** | **Week** |
| Logic Gates | 1 |
| Units | 2 |
| Binary | 3 |
| Hexadecimal Numbers | 4 |
| Characters | 5 |
| Storing images | 6 |
| Sound and Compression | 7 |
| Assessment | 8 |
| Super Teaching Week | 9 |

**Expectations:**

* Complete homework tasks each week.
* Your homework will be marked each week and your teacher will allocate the specific lesson / day.
* It must be completed by the due date.
* Use Knowledge organiser to help with your homework.

**Calendar Cycle 1**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **September** | 2 | 3 | 4 | 5 | 6 |  |
| 9 | 10 | 11 | 12 | 13 | Teaching week 1 |
| 16 | 17 | 18 | 19 | 20 | Teaching week 2 |
| 23 | 24 | 25 | 26 | 27 | Teaching week 3 |
| **October** | 30 | 1 | 2 | 3 | 4 | Teaching week 4 |
| 7 | 8 | 9 | 10 | 11 | Teaching week 5 |
| 14 | 15 | 16 | 17 | 18 | Teaching week 6 |
| 21 | 22 | 23 | 24 | 25 | Inset/Half term |
| 28 | 29 | 30 | 31 | 1 | Half term |
| **November** | 4 | 5 | 6 | 7 | 8 | Teaching week 7 |
| 11 | 12 | 13 | 14 | 15 | Teaching week 8 |
| 18 | 19 | 20 | 21 | 22 | Teaching week 9 |

**Name:**

**Teacher: Group:**

**Task 1: Week 1 Logic Gates**

Due Week 1, Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

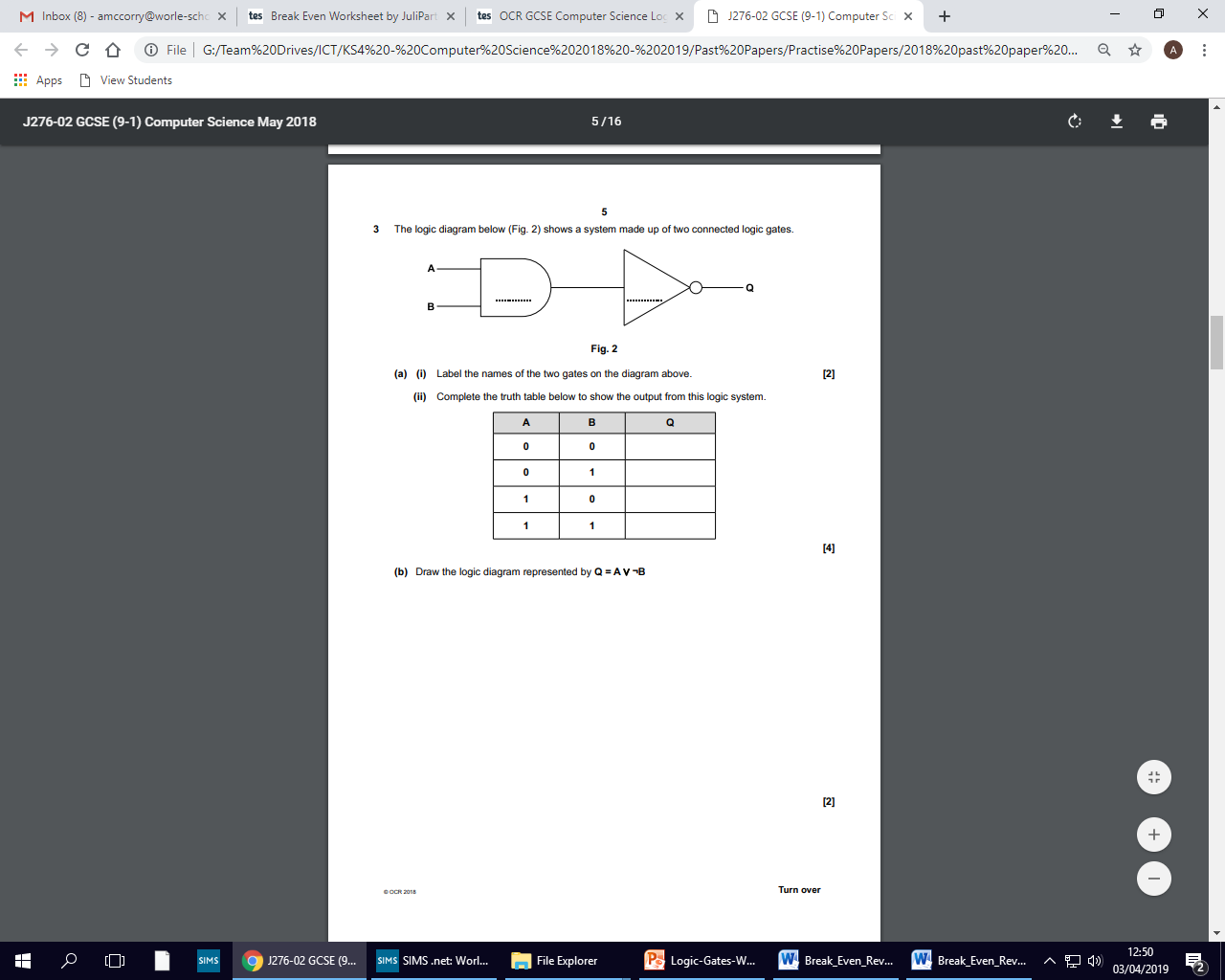
**Success Criteria: Use Page 64 for support**

|  |  |
| --- | --- |
| Draw a NOT gate |  |
| What are the features of a NOT gate? |  |
| Draw an AND gate |  |
| What are the features of an AND gate? |  |
| Draw a OR gate? |  |
| What are the features of a OR gate |  |

**Task 2: Week 2 Exam Preparation**

Due Week 2, Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Success Criteria: Complete the exam question (pg 64 in revision guide)**



**Task 3: Week 3 Units**

Due Week 3, Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Success Criteria: Draw a mind map of all the key information on Units using your revision guide on PG 66**

**Task 4: Week 4 Binary**

Due Week 4, Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Success Criteria: Draw the two examples out on pg 67 and annotate and explain in your own words:**

Example 1

Example 2

**Task 5: Week 5 Binary continued**

Due Week 5, Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Success Criteria: Explain in your own words what is meant by binary shift and give an example (pg69 in your revision guides)**

**Task 6: Week 6 Characters**

Due Week 6, Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Success Criteria: Explain in your own words what ASCII is and extended ASCII using pg 72 in your revision guide**

**Task 7: Week 7 Storing images**

Due Week 7, Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Success Criteria: Open up pg 73 and answer the following questions**

1. What are images stored as?
2. What does increasing colour depth and resolution do to size?
3. Explain what metadata is?
4. Explain what metadata is made up of?