

**Cycle 1 Homework**

**September 2019**

**Subject:**

**Computer Science**

**Year 8**

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

|  |  |
| --- | --- |
| **What you will learn** | **Week** |
| Introduction to Google classroom and folders/Introduction to networks  | 1 |
| Network Topologies  | 2 |
| Wired and wireless | 3 |
| The Internet  | 4 |
| The cloud and virtual networks | 5 |
| Network security threats | 6 |
| Network security threats continued | 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: Key words**

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

**Success Criteria:** Keywords

**Task:** Use your knowledge organiser to write in the definition for all the keywords below:

|  |  |
| --- | --- |
| **Keyword**  | **Definition**  |
| LAN |  |
| WAN |  |
| WPA |  |

**Task 2: LANS AND WANS**

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

**Success Criteria:** Understanding the key differences between LANS and WANS

**Task:** Draw an image of a LAN and WAN and explain key differences.

**LAN**:

**WAN:**

**What are their key differences?**

**Task 3: Explain each of the key words**

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

**Success Criteria:** Keywords

**Task:** Use your knowledge organiser to write in the definition for all the keywords below:

|  |  |
| --- | --- |
| **Keyword**  | **Definition**  |
| Server |  |
| Switch  |  |
| Router |  |
| Ethernet cable  |  |

**Task 4: Network Security**

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

**Success Criteria:** Mindmap all security threats using knowledge organiser

**Task:** Use your knowledge organiser to create a mind map below

**Task 5: Describe the characteristics of a Virus and Spyware**

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

**Success Criteria:** Understand and identify the key characteristics of a Virus and Spyware

**Task:** Complete the table below

|  |  |
| --- | --- |
| **Spyware**  |  |
| **Virus**  |  |

**Task 6: Describe the characteristics of Worms and Trojans**

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

**Success Criteria:** Understand and identify the key characteristics of a worms and Trojans

**Task:** Complete the table below

|  |  |
| --- | --- |
| **Worms** |  |
| **Trojans**  |  |

**Task 7: Consolidation of learning**

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

**Success Criteria:** Answer knowledge questions below

1. Explain what a LAN is with example
2. Explain what a WAN is with example
3. Explain the key difference between a router and a switch
4. Explain what Malware is
5. Identify and explain one type of network security

