**BTEC Level 3**

**Applied Science**

**Extended Certificate**

**Induction Task 2020**



**The Applied Science course is taught the following units:**

|  |
| --- |
| **Unit 1: Principles and Applications of Science I (Exam)**  This unit covers some of the key science concepts in biology, chemistry and physics. |
| **Unit 2: Practical Scientific Procedures and**  **Techniques (Assignments)**  This unit covers quantitative laboratory techniques, calibration, chromatography, calorimetry and laboratory safety, which are relevant to the chemical and life science industries. |
| **Unit 3: Science Investigation Skills (Marked Investigation)**  This unit covers the stages involved and the skills needed in planning a scientific investigation: how to record, interpret, draw scientific conclusions and evaluate. |
| **Unit 9: Human Regulation and Reproduction (Assignments)**  This unit will focus on how the internal environment of the human body is regulated and controlled, including how the nervous system controls the cardiovascular and respiratory systems and the role of hormones in the reproductive system. |

Overall, the assessment is 25% exam, 33% supervised assessment and 42% coursework

Independent Learning Tasks

These should be brought to the first lesson in September.

Task 1 (Biology)

The diagrams on the following pages should be labelled, and a list of the functions of each feature should be produced.

The information can be found on [www.cellsalive.com](http://www.cellsalive.com)

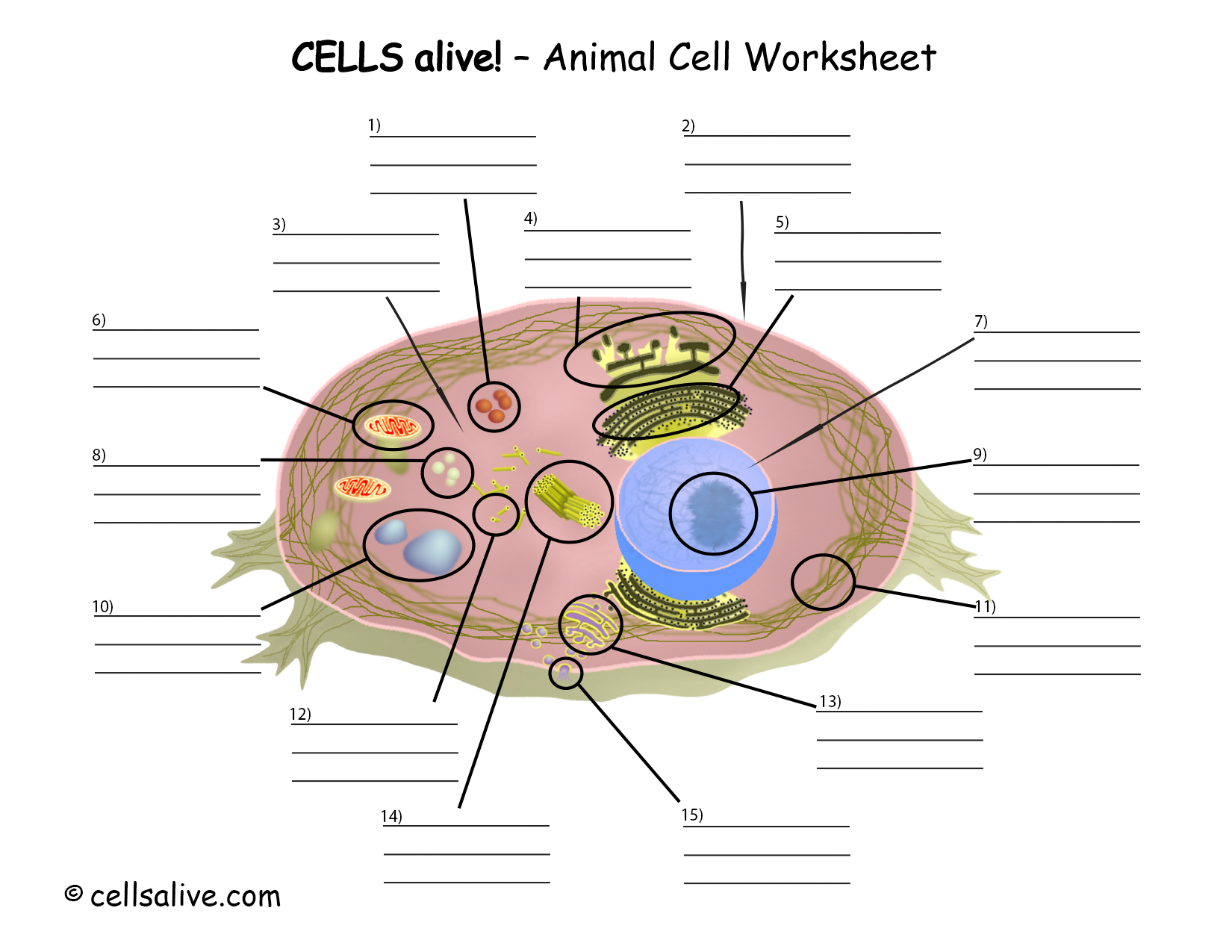
Task 2 (Chemistry)

Describe and explain the Bohr theory of atomic structure, with examples.

Task 3 (Physics)

Write an essay about the uses of fibre optics in medicine and communication. This should include:

* Endoscopes
* Broadband
* Analogue and digital signals



****

