**KEY**

**Unit 3**

**3.3.2 实验案例3-2 文章理解（T1）**

**(1) Reading Skills**

Keys

1）verb, verb, adjective, adjective, adjective.

2）adverb, noun, adjective, verb.

3）verb, verb, adjective, adverb.

4）verb, adjective, verb, adjective.

5）adjective, adverb, noun, noun.

**(2) Matching**

1) 2 2) 15 3) 11 4) 13 5) 20

6) 13 7) 20 8) 3 9) 15 10) 18

**(3) True or False**

1) T. The Time Traveler was expounding a recondite matter to us. (Para.2)

2) F. I shall have to controvert one or two ideas that are almost universally accepted.(Para.2)

3) F. There are really four dimensions, three of which we call the planes of Space. (Para.11)

4) T. That Space is spoken of as having three dimensions, which one may call Length, Breadth, and Thickness, and is always definable, by reference to three planes, each at right angles to the others. (Para. 15)

5) T. Well, I do not mind telling you I have been at work upon this geometry of Four Dimensions for some time. (Para. 17)

6) F. For instance, here is a portrait of a man at eight years old, another at fifteen, another at seventeen, another at twenty-three, and so on. All these are evidently sections, as it were, Three-Dimensional representations of his Four-Dimensioned being, which is a fixed and unalterable thing. (Para. 17)

7) T. Scientific people know very well that Time is only a kind of space. (Para. 18)

8) F. Time Traveler does not believe that people can move freely in Space. (Para.20)

9) F. We are always getting away from the present moment. (Para. 25)

10) F. Of course we have no means of staying back for any length of Time, any more than a savage or an animal has of staying six feet above the ground. But a civilized man is better off than the savage in this respect. (Para. 27)

**3.3.3 实验案例3-3 词汇学习（T1）**

**(1) Blank Filling**

1) admired 2) reasonable 3) mathematical 4) existence 5) cube

6) directions 7) extensively 8) philosophical 9) brightening 10) diagram

**(2) Word Bank**

1) flashed 2) overlook 3) cradle 4) luxurious 5) incline

6) proceed 7) abstraction 8) particularly 9) perspective 10) reference

**3.3.4 实验案例3-4 句型掌握（T1）**

**(1) Sentence Translation**

KEY

1) 壁炉里炉火熊熊，银制百合花灯里射出柔和的光亮，照在我们玻璃杯里跳动的气泡上。

2) 我们坐在他家的椅子上，与其说这些椅子是供人们坐的，不如说它们是在拥抱我们，抚慰我们。晚饭后的气氛舒适惬意，人们的思绪在这时候往往会不求精确，从容地驰骋奔流。

3) 菲尔比陷入了沉思。“很清楚”，时间旅客继续道，“任何一个实在的物体都必须向四个方向伸展：它必须有长度、宽度、高度以及--时间持续度。”

4) 实际上这就是第四维的内涵，虽然有些人谈论第四维时并不知道他们指的就是这个意思。这其实只是看待时间的另一种方式。

5) 你们都知道，我们可以在只有两维的平面上表现一个三维的立体图。同样，他们认为能够通过三维模型来表现四维的东西，只要他们能够掌握透视技法。

**(2) Sentence Imitation**

Keys

1) The principal’s voice was firm and soft, and her usually solemn face became kind and friendly.

2) The engineer put it to us in this way – marking all the problems with a ball-point pen – as we sat and gratefully accepted his help over this construction project.

3) “I”, murmured a very young woman，jumping to her feet and adjusting her dress, “I don ’t know”

4) “Now, it is beyond my wildest dreams!” continued the girl, with a slight accession of delightfulness.

5) “I know your secret.” murmured the film star; and knitting his brows, he lapsed into an unconscious state.

**3.3.6 实验案例3-6 文章理解（T2）**

**(1) Matching**

1) 2 2) 4 3) 3 4) 3 5) 1

6) 4 7) 2 8) 3 9) 4 10) 3

**(2) True or False**

KEY

1) F. Before them, people believed Aristotle, who said that the natural state of a body was to be at rest and that it moved only if driven by a force or impulse. (Para.1)

2) T. The Aristotelian tradition also held that one could work out all the laws that govern the universe by pure thought: it was not necessary to check by observation. (Para.2)

3) F . It is said that Galileo demonstrated that Aristotle’s belief was false by dropping weights from the leaning tower of Pisa. (Para.2)

4) T. Galileo’s measurements indicated that each body increased its speed at the same rate, no matter what its weight. (Para.2)

5) T. On the moon, where there is no air to slow things down, the astronaut David R. Scott performed the feather and led weight experiment and found that indeed they did hit the ground at the same time. (Para.2)

6) T. Galileo’s measurements were used by Newton as the basis of his laws of motion. (Para.3)

7) F . It also meant that whenever a body is not acted on by any force, it will keep on moving in a straight line at the same speed. This idea is known as Newton’s first law. (Para.3)

8) T. The more powerful the engine is, the greater the acceleration will be; but the heavier the car is, the smaller the acceleration for the same engine will be. (Para.3)

9) T. Newton’s law of gravity also tells us that the farther apart the bodies, the smaller the force. (Para.4)

10) T. For instance, playing Ping-Pong on the train, one would find that the ball obeyed Newton’s laws just like a ball on a table by the track. (Para.4)

**3.3.7 实验案例3-7 词汇学习（T2）**

**(1) Blank Filling**

1) motion 2) tradition 3) resistance 4) constantly 5) previously

6) straight 7) mass 8) original 9) increased 10) aside

**(2) Word Bank**

1) standards 2) indicate 3) accelerate 4) impulse 5) accurately

6) pure 7) previously 8) original 9) unique 10) predicting

**3.3.8 实验案例3-8 句型掌握（T2）**

**(1) Sentence Translation**

1) 重的物体比轻的物体下落得更快，因为它受到更大的将其拉向地球的力。

2) 这个故事几乎不足为信，但是伽利略的确做过相同的实验：让不同重量的铅球沿着光滑的斜面滚下。这种情况类似于重物的垂直下落，只是因为速度慢而更易观察而已。

3) 在没有空气阻碍东西下落的月球上，航天员大卫·司各特进行了羽毛和铅锤的实验，并发现两者确实同时落到月球表面上。

4) 根据牛顿引力定律，一个类似恒星在距离小一半时的引力只有一个恒星引力的四分之一。这个定律极其精确地预言了地球、月球和其他行星的轨迹。

5) 亚里士多德与伽利略和牛顿观点的巨大差别在于，亚里士多德相信一个静止状态，任何没有受到外力和冲击的物体都保持这种状态。

**(2) Sentence Imitation**

1) Our present ideas about this tradition date back over 200 years.

2) It is said that Benjamin Franklin proved that lightning was electricity by conducting a kite experiment during a thunderstorm.

3) The notion quality with equality was used by our president as the basis of his laws of management and operation.

4) This idea was first stated explicitly in Carl Marx and Frederick Engels’s *Manifesto of The Communist Party*, published in 1848, and is known as Communism.

5) The big difference between exposition and narration is that exposition is a writing which explains and describes something.

**3.3.10 实验案例3-10 写作技巧专栏**

**(1) Exercise**

1) Periodic + Periodic + Loose+ Balanced

2) Periodic + Balanced+ Loose+ Periodic

3) Loose + Periodic+ Balanced+ Loose

**(2) Translation**

1) To see you during the vacation was really a pleasure.

2) Although he wanted the job more than anything in the world, he knew he had little chance of getting it.

3) We came to our journey’s end at last, with no small difficulty, after much fatigue, through deep roads and bad weather.

4) Canada is certainly a less violent place than the United States, since in the U.S. a violent crime is committed every thirty-one seconds, compared with one every four minutes in Canada.

5) The role of a man is to provide and the role of a woman is to care for the household and family. This is a traditional perspective we were taught in the past.