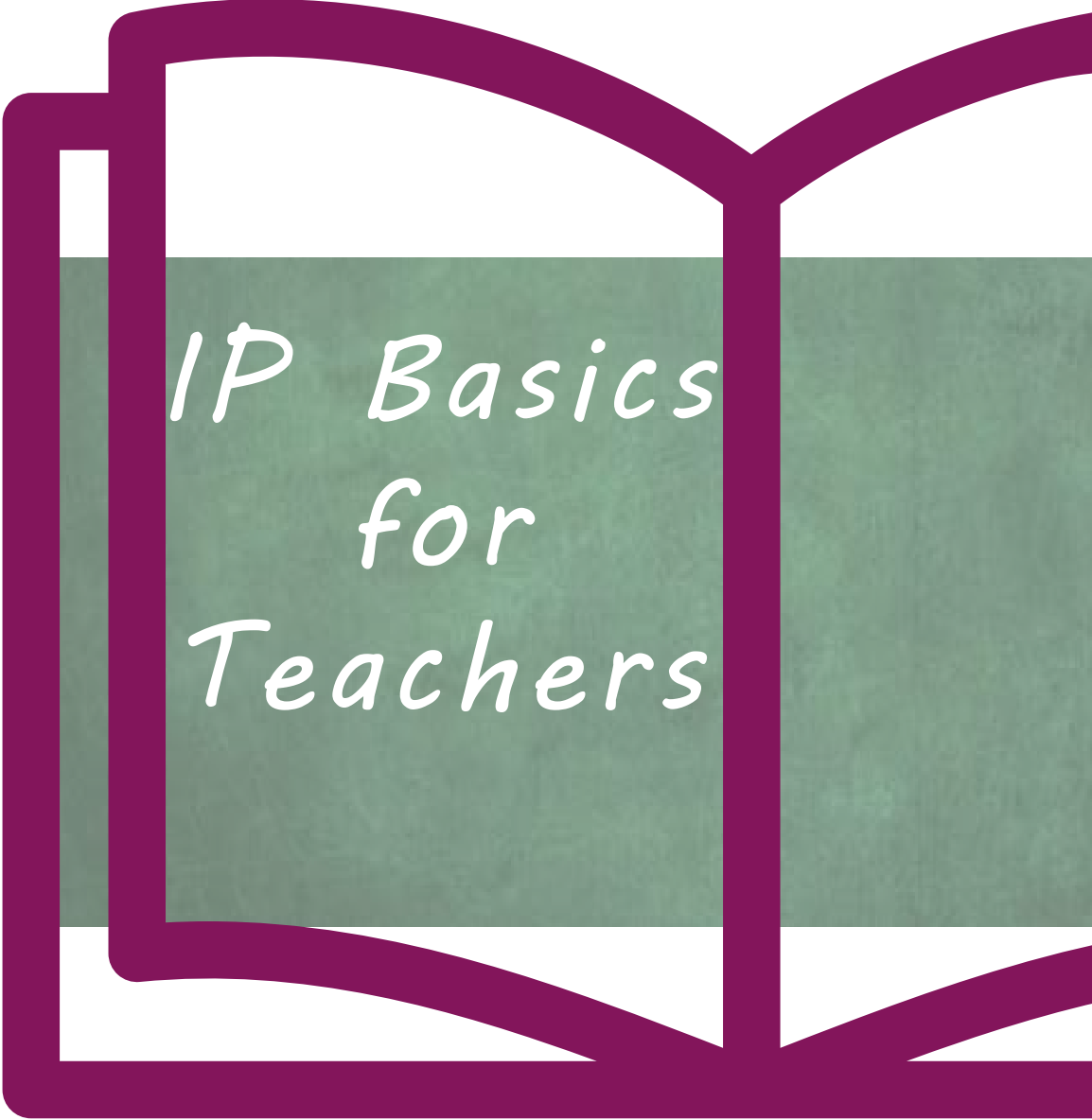


IP IN EDUCATION

INTELLECTUAL PROPERTY

IP Basics for Teachers



*IP Basics
for
Teachers*

IP Basics for Teachers

Introduction

Your school asks you to prepare a project for a national education competition. You are motivated. You find a great idea. You put a lot into preparing a detailed project to win the prize for your school. Then, an ex-colleague whom you trusted and had shown your work to presents a similar project for their new school which gets first prize. How do you feel?

Intellectual property (IP) protects the creations of the human intellect or the human mind and the purpose of IP rights is precisely to protect you from a similar scenario.

IP is not something new:

The idea of IP is not new. Some say it dates back to 500 BC when people started creating tools to ensure their survival and upgrade their quality of life. The first intellectual property right came about when the Greek State of Sybaris allowed its citizens to obtain a patent for 'any new refinement in luxury'.

The State wanted to reward the creation of original recipes and cooking products. Since then, many refinements have been made and laws written regarding intellectual property. However, the intent of IP law has always remained the same over time - to boost creativity. In order to do so, some kind of exclusive privilege to use the creation is given to the creator.

Nowadays, the objects that form part of our daily lives are getting more and more complex. For example, a smart phone is protected by hundreds of thousands of IP rights. The same goes for most objects and services that form part of our modern lives.

TM

Trade marks are distinctive signs which serve to differentiate the products & services of a company from its competitors. Behind a brand there are people working, investing, researching & developing products and services that enhance different aspects of our lives.

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Trade marks

- Name of the phone
- Start-up tone
- Instagram logo

D


Design encompasses the appearance of any product (or even part of a product) - the shape and colour, the materials used, the packaging, so pretty much any item made can be registered as a design. But design is even broader than that! It includes logos, maps, fonts, and more. The design does not have to be beautiful, attractive or artistic; it simply has to be different.

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Designs

- Shape of overall phone
- Arrangement and shape of buttons
- Position and shape of screen

Did you know
that there are more than
250,000
active patents
relevant to today's smartphones?



P

Some people dedicate years or even decades to an invention that could change the world. Some people strike upon a genius idea in a "eureka" moment. The idea behind **patents** is that those inventors deserve to be rewarded for their hard work as well as for their insight. In exchange for sharing their invention with the world, patent holders get the exclusive rights to make and sell or otherwise distribute their invention.

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Patents

- Data-processing methods
- Operating system
- Operation of user interface

C

Copyright is a set of rules that protect artistic and literary works. Think movies, music, poems, paintings, comics, etc. It's basically the right to be the only one who decides who can use your work. For example, say you write a song. Unless you give permission, no-one else can copy it or say it's their song. It's your song. Of course if you want, you could give someone else permission to perform it or record it.

.....

TS

A **trade secret** is confidential business information with commercial or economic value, which provides an enterprise with a competitive edge because of its secrecy. Trade secrets are protected without registration or formalities. Thus a trade secret can be protected for an unlimited period of time. There are some conditions for the information in order to get protection. The information has to be secret, to have commercial value and the rights holder must have taken reasonable steps in order to keep it secret. However, this varies from country to country. An example would be the famous Coca-Cola formula.

Copyright

What is copyright?

Copyright is one of the most widely-known intellectual property rights and the one that most affects teachers. It protects any tangible production of the human mind, provided that this production is not a mere idea.

Everyone is a copyright owner: big artists, small artists, recognised authors and unrecognised authors (who may be teachers or students). A PowerPoint presentation is probably subject to copyright. This factsheet is definitely subject to copyright.

To obtain protection by copyright the production must be original. To make it simple, a work is original when it reflects the author's personality and expresses his or her free and creative choices.

The classic example is two painters sitting at the same moment in front of a model: while the subject is the same, the work of each painter will be different.



Original works include novels, plays, poetry, music, songs, drawings, paintings, sculptures, photos, film scripts, films and videos, textile designs, architectural plans, databases and computer programmes.

Most of you have copied a copyrighted photo from the internet for a lesson. All of you have downloaded a movie or a song. These actions fall under copyright law.

Copyright law grants the creator exclusive rights to determine whether, and under what conditions, his or her original work may be used by others. It gives the owner two rights:

What are your rights under copyright law?

An economic right

- to the exploitation of the work. The right to control the reproduction of the work, the communication of the work to the public, its translation, adaptation, distribution and resale. It grants the creator long-lasting protection to reward him or her and at the same time, to make sure that his or her family can enjoy the economic benefits from the work and its success.
- to be recognised as the author of your original work. Moral rights are rights generally recognised in Europe, though their level of protection differs from country to country.

A moral right

They include the right to:

- have the name of the creator indicated;
- have a work published anonymously or pseudonymously;
- the integrity of the work bars the work from alteration, distortion, or mutilation.
- decide if and when to divulge the work. Since it is commonly considered that when an author makes his or her work publicly available, they are exposing an aspect of their personality to society, it is commonly accepted that moral rights have no limits in time.

How is a work protected by copyright?

No registration requirement exists for copyright protection. The protection exists from the very moment a work is created. In some countries, optional registration processes are available. Registration can be useful for the purposes of providing evidence, as it can help to prove that the work existed at a certain date.

The protection period of copyright is very long. In the EU, protection lasts for the lifetime of the author plus 70 years after his or her death.

Copyright is territorial. In other words, protection is granted on a country-by-country basis. However, international instruments, such as international conventions containing rules applicable to countries all over the world, set some minimum standards for copyright protection.

What are the exceptions to the creator's rights?

Works can be used without the consent of the author or the rights holder mainly for these purposes, but other exceptions exist:

the reproduction of a work for private use;

the use of short quotations from a work for the purposes of criticism or review;

the use of extracts for the purpose of illustration for teaching or scientific research.

Frequently Asked Questions (FAQs) to inform consumers about what is legal and what is not as far as the use of copyright and related rights-protected content on the internet is concerned can be found through the following link: [EUIPO FAQs on copyright](#)



Trade Marks

What is a trade mark?

A trade mark is a distinctive sign which identifies goods and services as coming from a particular company and distinguishes them from those of its competitors. It can be a word, a picture, a symbol or a shape, a figurative element, a slogan, a colour or even a sound.



A trade mark in itself is not protected. It is protected in relation to specific products and/or services. So, Nike, as a name, is not protected. However, the name 'Nike' in relation to sportswear is protected. In theory, it means that someone could also use the name 'Nike' to sell other, unrelated products such as fruits and vegetables. However, higher protection can be granted to well-known trade marks (such as Nike) meaning that it is not permitted to use Nike in relation to other goods and service than shoes.

A trade mark is the IP right that enables businesses:

- to make a connection between their products and services and their customers;
- to build customer loyalty and brand recognition;
- to distinguish their products and services from those of rival companies.

Trade marks:

- are an essential element of success in terms of business competition;
- represent the investment of a company in its image and brand;
- are most companies' preferred IP right;
- are often the most valuable asset of a company.

A good trade mark should have no connection with the products and services it covers. To protect 'Sports shoes' to cover sports shoes is not possible as it would prevent anyone else from using the words 'sports shoes' to sell their sports shoes. 'Nike', on the other hand, has no direct, obvious link to the products it covers and anyone can sell sports shoes under any other name. Trade marks do not affect the creativity or innovation of businesses. They are distinctive signs which can be protected endlessly, provided they meet the following requirements. They must:

be clear, precise, easily accessible and objective;

have a distinctive character;

not deceive the public;

be available;

cover a list of products and/or services.

How is a trade mark protected?

Trade marks need to be registered in order to be protected. Depending on where applicants intend to do trade, they can apply:

- country per country through the national IP offices;
- for a European Union trade mark through the [European Union Intellectual Property Office \(EUIPO\)](#);
- through the [World Intellectual Property Organization \(WIPO\)](#) for protection in multiple countries via one application that is then dispatched and processed in each of the selected countries.

Trade mark registration confers protection for a period of several years, usually ten, from the date of filing, and can be renewed for unlimited additional periods of ten years.

What are the advantages of trade marks?

Economic value

They are one of the most popular and valuable assets of a company. They can have enormous economic value and great importance for businesses.

Registration process

The registration process is usually smooth and speedy. To have a trade mark protected within a few weeks is possible.

Protection

They offer a wide range of legal protection. The owner is entitled to prevent third parties from using a trade mark in the course of trade. It concerns not only any identical sign for identical goods and services but also any similar sign for similar goods and services, provided there is a likelihood of confusion by the public.

What are the disadvantages of trade marks?

Cost

The trade mark owner needs to pay in order to register and renew trade marks (but it is much less than for patents).

Obligation to use

The obligation to use the trade mark for the products and services for which it has been registered — in the absence of such use after a certain period (normally 5 years) the trade mark may be cancelled.

Generic use of name

Trade mark owners have to make sure that their registered sign does not become a generic name, that is, the name commonly used to describe the products or services in question.

Designs

What is a design?

A design is the IP right that covers the appearance of a product. In its legal definition, it is the outward or visible appearance of the whole or part of product resulting from its features. These features can be lines, colours, shapes, textures, contours, materials or ornamentation. This very broad definition covers almost any creation with visible aspects.

The following can be protected as designs:

- any industrial or handicraft item or product;
- packaging;
- graphic symbols;
- parts assembled into a complex product;
- drawings and art work.

A product does not have to be produced on an industrial scale or have artistic value in order for it to be a design.

The success and importance of a design is in its appeal to the product's users. Users are often attracted by highly creative designs. New shapes or colours can give a strong boost to the sale of ordinary products and therefore, the design of the product can become a key element in a company's effort to make its products more attractive to users. Consequently, industrial designs can have a very high commercial value, and a manufacturer may obtain a decisive advantage in the market by creating a new look for its product.

In order for the appearance of the product to be eligible for protection as a design in Europe, it has to fulfil two requirements:

Novelty: A design is considered to be new if no identical design has been made available to the public before the date of filing the application.

Individual character: The design must give a different overall impression to an 'informed user' from any other design disclosed earlier. The 'informed user' is an intermediate character who is neither a designer nor a technical expert.

These products are excluded from design protection:

- computer programmes;
- those contrary to public policy or morality, for example, obscene, racist or immoral images or messages;
- those incorporating protected official symbols or emblems such as a national flag;
- non-visible component parts of complex products;
- features of the appearance of the product solely dictated by a technical function.

How is a design protected?

A design needs to be registered in order to get full protection. Designs may be registered:

- country per country through national IP offices;
- at European Union level as a Community design that covers all EU Member States automatically with one single registration via the [European Union Intellectual Property Office \(EUIPO\)](#);
- through an international application managed by the [World Intellectual Property Organization \(WIPO\)](#).

Registration is speedy and a Community design can be registered in a few days. The protection of a design is limited in time. In the European Union, the initial period of protection is five years from the date of filing the application. Protection can be renewed for additional periods of five years each, up to a maximum of 25 years.

What are the advantages of registered designs?

Official title	To prove the existence and ownership of the design.
Exclusivity	The protection offered by registered rights gives the owner of the design the exclusive right to use it.
Protection	The owner of a registered design may prevent third parties from using the protected design in different forms, including: making, offering or putting the protected design on the market, importing, exporting or using a product in which the design is incorporated and stocking such a product for those purposes.

Unregistered designs

In Europe, a design can also be protected automatically without registration for the whole European Union. However, this protection is limited and only lasts for three years starting from the date on which the design is first made available to the public within the European Union. This protection is applicable only against identical copies of the design. This system of protection is widely used in the fashion industry.

Geographical indications

What is a geographical indication?

A geographical indication (GI) is a sign used on products having a specific geographical origin and whose qualities and/or reputation are attributable to that origin. GIs are typically used for agricultural products, foodstuffs, wine and spirit drinks, handicrafts, and industrial products, and refer to place names. However, nongeographical names can also be protected if they are linked to a particular place. For example, Feta cheese is not named after a place, but after the Italian word “fetta”, meaning “slice”, which was incorporated into the Greek language in the 17th century. However, several factors such as the fact that 85% of EU consumption of feta cheese per capita and per year takes place in Greece or the fact that feta is usually marketed with labels referring to Greek cultural traditions and civilisation, make EU consumers perceive feta as an inherently Greek product.

In order to function as a GI:

- it must identify a product as originating in a given place (e.g. Chianti identifying a wine originating in the Italian region of Chianti or Roquefort cheese originating in the Roquefort-sur-Soulzon region in France);
- the qualities, characteristics or reputation of the product should be due to the place of origin (e.g. the qualities of Chianti are due to the grapes grown in the soil of that specific Italian region, while the qualities of Roquefort result from the characteristics of the milk obtained from indigenous breeds of sheep fed according to the tradition and the characteristics of the caves in which the cheese is aged).

European Union protection for GIs

Protected Designations of Origin (PDO) identify products that are produced, processed and prepared in a specific geographical area, using the recognised know-how of local producers and ingredients from the region concerned.

PDO products thus require all stages of the food production process to be carried out in the area concerned. Some examples of PDOs include Bordeaux PDO (France, wine), Cava PDO (Spain, wine), Manouri PDO (Greece, cheese).



Protected Geographical Indications (PGI) identify products whose quality or reputation is linked to the place or region where they are produced, processed or prepared, although the ingredients used need not necessarily come from that geographical area. Products bearing the PGI logo have a specific characteristic or reputation associating them with a given place, and at least one stage in the production process must be carried out in that area, while the raw materials used in production may come from another region. Some examples of PGIs include České pivo PGI (Czech Republic, beer), Lammefjordskartofler PGI (Denmark, vegetable) or Primorska PGI (Slovenia, wine).

Why not search for Geographical Indications on <https://www.tmdn.org/giview/>

Or discover European quality GI products with mouth-watering recipes here: [GI recipes](#)

Trade Secrets

What is a trade secret?

The term 'trade secret' may sound old-fashioned. In an age of instant internet searches, very little seems to be unknown or unknowable. But trade secrets still have — and probably always will have — an important role to play in giving businesses a competitive edge. Together with trade marks, trade secrets are key elements of many franchise networks such as fast food restaurants, hairdressers, clothes shops, etc.

Trade secrets, sometimes referred to as know-how, involve the confidential business information that provides an enterprise with their competitive edge. A trade secret is information that is not known to anyone other than the companies that own the products and their employees.

Trade secrets encompass manufacturing/industrial secrets and commercial secrets. They include, among other things, sales methods, distribution methods, consumer profiles, advertising strategies, lists of suppliers and clients, price lists and, of course, manufacturing processes.

They can be positive information (good practices) as well as negative information (errors not to be made).

What are the criteria for a trade secret?

A trade secret can only be a trade secret as long as it remains a secret. The information in a trade secret:

must have business, commercial or economic value;

must not be known;

must not be easily discoverable.

Reasonable efforts to maintain secrecy must be demonstrated.

TOP SECRET

Is a trade secret an intellectual property right?

The answer is no. Trade secrets are not an intellectual property right as such. The holder of a trade secret does not have an exclusive right over his or her creation. He or she cannot prevent competitors from discovering the secret or coming up with the same solutions.

Trade secrets can be independent or complementary to patents. They are heavily used in the creative process leading to innovation. Until an invention is filed for protection, the inventor must take great care to maintain the confidentiality of the invention in order to secure the novelty requirement.

In franchise agreements, the franchisor supplies the franchisees with the relevant know-how that is regularly upgraded in order to maintain the competitive advantage of the franchise network.

Trade secrets are only legally protected in instances where someone has obtained the confidential information by illegitimate means (e.g. through spying, theft or bribery).

Patents

What is a patent?

A patent grants innovators protection for an invention. An invention is a solution to a specific technological problem in the form of a product or a process that makes our life easier or better. When a new solution is successful, it becomes a powerful tool in the hands of the innovator and an important competitive advantage for a company in the market.

Therefore, it is very likely that competitors will want to make similar or identical products. To protect the innovator and encourage further creativity, a patent allows the innovator to prevent others from remaking, using, selling or importing a product that copies their invention.

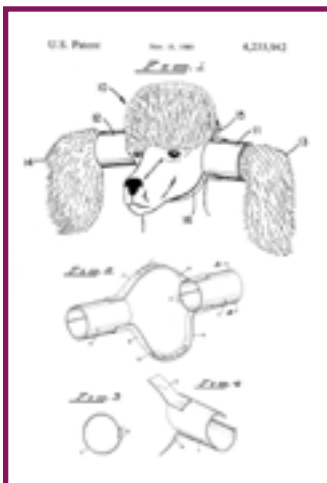
A patent blocks a particular technology and improvements, which is why patent validity is limited in time. The maximum term of protection for a European patent is 20 years from its filing date.

Inventions can be something as simple as a toy to something as complicated as a nuclear weapon. The United States Supreme Court once considered that patentable subject matter included 'anything under the sun that is made by man.' In Europe, to be patentable, an invention must fulfil three requirements:

Novelty: It was not previously known to the public in any form, anywhere at anytime.

Inventive step: It must go one step beyond what was already known. It can't be a simple 'continuity' or 'variation' of what already existed.

Industrially applicable: It can be manufactured or used on an industrial scale.



For example:

This invention provides a device for protecting the ears of animals, especially long-haired dogs, from becoming soiled by food while they are eating.

The device provides a generally tubular shaped member for containing and protecting each ear of the animal, and a member to position the tubular member and animal ears away from the mouth and food of the animal while it is eating.

How is a patent registered?

A business or innovator can apply for a patent:

- in a specific country via the national Patent Office;
- in one or several European countries via the [European Patent Office](#) (EPO);
- at global level via the [World Intellectual Property Organization](#) (WIPO).

What are the disadvantages of patents?

Time

The processing time of applications can take years.

Publication

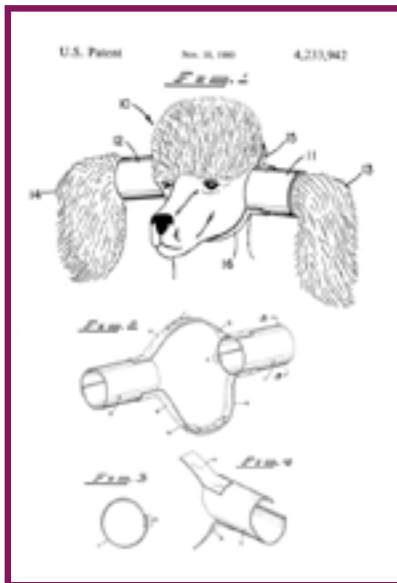
The application process involves the publication of the technical details (the secret of the invention).

Costs

A patent needs to be renewed on an annual basis. Bearing in mind that inventions are often protected by multiple patents, expenses can quickly mount up.

Getting a patent does not guarantee business success. The innovator needs to make sure that the benefit of a patent will outweigh the time, effort and money it takes to get and maintain one. When registering a patent, companies have to describe their invention in detail and reveal its secrets. A patent does not protect products as such, it protects the different steps of the innovation in what are called claims. Drafting proper patent claims is an art form in itself and must be done by patent attorneys.

The claim:



- A device for protecting animal ears comprising:
- a pair of generally tubular protectors, each of which is formed by a sheet of self-biasing material which in their free state tends to form themselves into said generally tubular
 - each of said protectors being longitudinally openable to allow easy insertion of one of the animal ears;
 - positioning means for flexibly joining one end of one protector in spaced apart relationship with one end of the other protector and for securing said device to the head of said animal such that the longitudinal axis of each protector and a portion of each ear of said animal, are held generally horizontally and approximately perpendicularly to the head of said animal whereby the ends of said animal ears are separated by a distance greater than the width of the head of the animal.

Many big companies use other IP rights to protect products that could have been registered as patents without revealing their secrets. Coca Cola, for example, never patented the formula of its products, preferring to keep it secret. This strategic choice has helped the company make sure that 'Coca Cola' remains famous without risking the exposure of its recipe.

In this instance, the decision to register a patent also depends on the mystery and the technicality of the patent. If an invention can easily be reverse engineered by dismantling, for example, a motor, a secret protection will not work. In the case of Coca Cola, it was appropriate, as it was very difficult to reverse engineer.

The IP Quiz

1 Intellectual property ...

- A has existed for a long time
- B consists of a suite of rights
- C protects creations
- D all of the above

2 Intellectual property can ...

- A protect inventions
- B protect written work and presentations
- C add value to a business
- D do all of the above

3 To get a patent, an invention must ...

- A be novel
- B go one step further than what already exists
- C be industrially applicable
- D fulfil all of the above requirements

4 A trade mark ...

- A protects an invention
- B protects confidential information
- C distinguishes products and services
- D protects the appearance of products

5 A design ...

- A is the outward appearance of a whole or part of a product
- B doesn't need to be registered to be fully protected
- C has to have artistic value
- D doesn't usually have a high commercial value

6 Copyright takes effect ...

- A when a creation is published or exhibited
- B automatically with the creation of a work
- C when a creation is registered
- D when a creation is valuable

7 Which of these are protected by copyright?

- A computer programmes and databases
- B photos and videoclips
- C musical scores and song lyrics
- D all of the above

8 If a student has a great innovative idea, she or he should ...

- A be careful when telling people about it
- B get advice about how to protect it
- C publicise it on social media to make it well known
- D answers A and B are correct

9 An average smartphone has ... patents.

- A 250
- B 2,500
- C 25,000
- D 250,000

10 A car is protected by ...

- A patents
- B a trade mark and registered design
- C copyright
- D all of the above

Answers: 1D 2D 3D 4C 5A 6B 7D 8D 9D 10D