

Name: _____

date: _____

Reading Exercises: Matching headings

- 1- Read the text and answer the questions below.

Simplicity reigns at London's biggest design festival.

(A) With upwards of 300 product launches, installations and exhibitions, London's annual nine-day design festival is a showcase of head-spinning choice. In many ways that's the beauty of the extravaganza, everyone has a different experience and takes something unique away from it. There were however some intriguing themes and trends in this year's edition that spoke to larger social or cultural preoccupations.

(B) One was the launch of two consumer electronics products designed to simplify and beautify our technology-addled lives. Both chose the new London Design Festival venue of Somerset House to show their wares. The first was a mobile phone launched by Swiss company Punkt and designed by Jasper Morrison that allows users to make calls and texts only (well, it has an alarm clock and an address book too). Punkt founder Petter Neby doesn't believe it will replace your smart phone but suggests users fit it with the same SIM card as your main phone and use it in the evenings, weekends and on holiday.

(C) The other electronics launch came from the unlikely French sibling duo of the Bouroullec brothers. Though tech companies like Samsung are usually prescriptive about their products the Bouroullecs (who admitted they found most TVs sad and ugly) seem to have been given free rein. Their new television for the mega Korean brand looks more like an item of furniture than an ultra-large and ultra-slim piece of tech. More importantly, it comes with simplified on-screen interaction and a 'curtain mode' that turns your screen into a shimmering pattern during ads or half-time. Again, their focus was on dialing down digital insanity.

(D) Customizable online furniture was also very much in vogue at this year's festival. But rest assured, weird and unreliable software or off-the-wall designs sent to a 3D printer somewhere and arriving months later, seem to be a thing of the past. Customization may finally have come of age. Two examples were Scandi-brand Hem that combined good design by the likes of Luca Nichetto, Form Us With Love and Sylvain Willenz with affordable price points. The fact that the brand opened a pop-up store in Covent Garden during the festival is a recognition of the importance of both physical and online spaces that work seamlessly together.

(E) Another online configurable brand to make its debut after years in development was Warsaw-based Tylko. Like Hem, Tylko has spent time and money on very powerful and easy-to-use software, but with only three designs - a table, a shelf and salt and pepper mills - it has a way to go. Its augmented reality app is simple to use however and its table has been developed with a nano-coating option that really does appear to keep pesky stains at bay. Craft and 'making' in all its forms was once again a big hit and nowhere more so than at TENT, the East London design event that gets better every year.

(F) A definite highlight was the massive space taken over by the Design & Crafts Council of Ireland and filled with weavers and potters doing their thing and showing their wares. Irish Design had another delectable stand over at the Rochelle School in East London too. The Souvenir Project was a series of nine non-cliché 'souvenirs' made in Ireland and included a rainbow plate by Nicholas Mosse Pottery that featured rows of animals, flowers and watering cans and commemorated the legalization of same-sex marriage in Ireland in May 2015.

(G) If there was one material that could be said to define the festival it might just be Jesmonite, the wonder man-made building composite. Lighter and more sustainable than concrete, its dramatic capabilities were brought to life by London-based design studio PINCH and their tour-de-force limited edition Nim table and Swedish artist Hilda Hellström's giant colorful volcano made for the restaurant in London's Ace Hotel. A show called Matter of Stuff near Covent Garden was in on the jesmonite act too, but even more intriguingly was presenting vases made out of Propolis, a resinous material collected by bees and used to seal gaps in hives that, according to their designer Marlene Huissoud, behaves like glass.

(H) Finally, this was the year that Chinese Design finally displayed a well-edited and inspired showcase of products. Despite the mouthful of a title, Icon Presents: Hi Design Shanghai stand at 100% Design was a meaningful selection of designers exploring materials and ideas. Young design duo Yuue's offerings were the most representative of a new conceptual approach to design that seems to be emerging. Their lamps were functional but also thought-provoking and humorous. What more could one want from the stuff that surrounds us?

Questions 1-8

The text has eight paragraphs **A-H**. Which paragraph contains the following information? Write the correct letter, **A-H**, in boxes **1-8** on your answer sheet.

1. Examples of customization
2. Unusual keepsakes
3. A new approach
4. A simple cell phone
5. Unbelievable material
6. A strange TV
7. Number of products shown on the festival
8. Three designs of a software

READING PASSAGE 2

Life lessons from villains, crooks and gangsters

(A) A notorious Mexican drug baron's audacious escape from prison in July doesn't, at first, appear to have much to teach corporate boards. But some in the business world suggest otherwise. Beyond the morally reprehensible side of criminals' work, some business gurus say organised crime syndicates, computer hackers, pirates and others operating outside the law could teach legitimate corporations a thing or two about how to hustle and respond to rapid change.

(B) Far from encouraging illegality, these gurus argue that – in the same way big corporations sometimes emulate start-ups – business leaders could learn from the underworld about flexibility, innovation and the ability to pivot quickly. "There is a nimbleness to criminal organisations that legacy corporations [with large, complex layers of management] don't have," said Marc Goodman, head of the Future Crimes Institute and global cyber-crime advisor. While traditional businesses focus on rules they have to follow, criminals look to circumvent them. "For criminals, the sky is the limit and that creates the opportunity to think much, much bigger."

(C) Joaquin Guzman, the head of the Mexican Sinaloa drug cartel, for instance, slipped out of his prison cell through a tiny hole in his shower that led to a mile-long tunnel fitted with lights and ventilation. Making a break for it required creative thinking, long-term planning and perseverance – essential skills similar to those needed to achieve success in big business.

(D) While Devin Liddell, who heads brand strategy for Seattle-based design consultancy, Teague, condemns the violence and other illegal activities he became curious as to how criminal groups endure. Some cartels stay in business despite multiple efforts by law enforcement on both sides of the US border and millions of dollars from international agencies to shut them down. Liddell genuinely believes there's a lesson in longevity here. One strategy he underlined was how the bad guys respond to change. In order to bypass the border between Mexico and the US, for example, the Sinaloa cartel went to great lengths. It built a vast underground tunnel, hired family members as border agents and even used a catapult to circumvent a high-tech fence.

(E) By contrast, many legitimate businesses fail because they hesitate to adapt quickly to changing market winds. One high-profile example is movie and game rental company Blockbuster, which didn't keep up with the market and lost business to mail order video rentals and streaming technologies. The brand has all but faded from view. Liddell argues the difference between the two groups is that criminal organisations often have improvisation encoded into their daily behaviour, while larger companies think of innovation as a set process. "This is a leadership challenge," said Liddell. "How well companies innovate and organise is a reflection of leadership."

Left-field thinking

(F) Cash-strapped start-ups also use unorthodox strategies to problem solve and build their businesses up from scratch. This creativity and innovation is often borne out of necessity, such as tight budgets. Both criminals and start-up founders "question authority, act outside the system and see new and clever ways of doing things," said Goodman. "Either they become Elon Musk or El Chapo." And, some entrepreneurs aren't even afraid to operate in legal grey areas in their effort to disrupt the marketplace. The co-founders of music streaming service Napster, for example, knowingly broke music copyright rules with their first online file sharing service, but their technology paved the way for legal innovation as regulators caught up.

(G) Goodman and others believe thinking hard about problem solving before worrying about restrictions could prevent established companies falling victim to rivals less constrained by tradition. In their book *The Misfit Economy*, Alexa Clay and Kyra Maya Phillips examine how individuals can apply that mindset to become more innovative and entrepreneurial within corporate structures. They studied not just violent criminals like Somali pirates, but others who break the rules in order to find creative solutions to their business problems, such as people living in the slums of Mumbai or computer hackers. They picked out five common traits among this group: the ability to hustle, pivot, provoke, hack and copycat.

(H) Clay gives a Saudi entrepreneur named Walid Abdul-Wahab as a prime example. Abdul-Wahab worked with Amish farmers to bring camel milk to American consumers even before US regulators approved it. Through perseverance, he eventually found a network of Amish camel milk farmers and started selling the product via social media. Now his company, Desert Farms, sells to giant mainstream retailers like Whole Foods Market. Those on the fringe don't always have the option of traditional, corporate jobs and that forces them to think more creatively about how to make a living, Clay said. They must develop grit and resilience in order to last outside the cushy confines of cubicle life. "In many cases scarcity is the mother of invention," Clay said.

2) Reading Passage 2 has eight paragraphs **A-H**. Match the headings below with the paragraphs. Write the correct letter, **A-H**, in the spaces.

- 1) Jailbreak with creative thinking
2. Five common traits among rule-breakers
3. Comparison between criminals and traditional businessmen
4. Can drug baron's escape teach legitimate corporations?
5. Great entrepreneur
6. How criminal groups deceive the law
7. The difference between legal and illegal organisations
8. Similarity between criminals and start-up founders

READING PASSAGE 3

The atom bomb was one of the defining inventions of the 20th Century. So how did science fiction writer HG Wells predict its invention three decades before the first detonations?

(A) Imagine you're the greatest fantasy writer of your age. One day you dream up the idea of a bomb of infinite power. You call it the "atomic bomb". HG Wells first imagined a uranium-based hand grenade that "would continue to explode indefinitely" in his 1914 novel *The World Set Free*. He even thought it would be dropped from planes. What he couldn't predict was how a strange conjunction of his friends and acquaintances - notably Winston Churchill, who'd read all Wells's novels twice, and the physicist Leo Szilard - would turn the idea from fantasy to reality, leaving them deeply tormented by the scale of destructive power that it unleashed.

(B) The story of the atom bomb starts in the Edwardian age, when scientists such as Ernest Rutherford were grappling with a new way of conceiving the physical world. The idea was that solid elements might be made up of tiny particles in atoms. "When it became apparent that the Rutherford atom had a dense nucleus, there was a sense that it was like a coiled spring," says Andrew Nahum, curator of the Science Museum's *Churchill's Scientists* exhibition. Wells was fascinated with the new discoveries. He had a track record of predicting technological innovations. Winston Churchill credited Wells for coming up with the idea of using aeroplanes and tanks in combat ahead of World War One.

(C) The two men met and discussed ideas over the decades, especially as Churchill, a highly popular writer himself, spent the interwar years out of political power, contemplating the rising instability of Europe. Churchill grasped the danger of technology running ahead of human maturity, penning a 1924 article in the *Pall Mall Gazette* called "Shall we all commit suicide?". In the article, Churchill wrote: "Might a bomb no bigger than an orange be found to possess a secret power to destroy a whole block of buildings - nay to concentrate the force of a thousand tons of cordite and blast a township at a stroke?" This idea of the orange-sized bomb is credited by Graham Farmelo, author of *Churchill's Bomb*, directly to the imagery of *The World Set Free*.

(D) By 1932 British scientists had succeeded in splitting the atom for the first time by artificial means, although some believed it couldn't produce huge amounts of energy. But the same year the Hungarian emigre physicist Leo Szilard read *The World Set Free*. Szilard believed that the splitting of the atom could produce vast energy. He later wrote that Wells showed him "what the liberation of atomic energy on a large scale would mean". Szilard suddenly came up with the answer in September 1933 - the chain reaction - while watching the traffic lights turn green in Russell Square in London. He wrote: "It suddenly occurred to me that if we could find an element which is split by neutrons and which would emit two neutrons when it absorbed one neutron, such an element, if assembled in sufficiently large mass, could sustain a nuclear chain reaction."

(E) In that eureka moment, Szilard also felt great fear - of how a bustling city like London and all its inhabitants could be destroyed in an instant as he reflected in his memoir published in 1968:

"Knowing what it would mean - and I knew because I had read HG Wells - I did not want this patent to become public." The Nazis were on the rise and Szilard was deeply anxious about who else might be working on the chain reaction theory and an atomic Bomb. Wells's novel *Things To Come*, turned into a 1936 film, *The Shape of Things to Come*, accurately predicted aerial bombardment and an imminent devastating world war. In 1939 Szilard drafted the letter Albert Einstein sent to President Roosevelt warning America that Germany was stockpiling uranium. The Manhattan Project was born.

(F) Szilard and several British scientists worked on it with the US military's massive financial backing. Britons and Americans worked alongside each other in "silos" - each team unaware of how their work fitted together. They ended up moving on from the original enriched uranium "gun" method, which had been conceived in Britain, to create a plutonium implosion weapon instead. Szilard campaigned for a demonstration bomb test in front of the Japanese ambassador to give them a chance to surrender. He was horrified that it was instead dropped on a city. In 1945 Churchill was beaten in the general election and in another shock, the US government passed the 1946 McMahon Act, shutting Britain out of access to the atomic technology it had helped create. William Penney, one of the returning Los Alamos physicists, led the team charged by Prime Minister Clement Atlee with somehow putting together their individual pieces of the puzzle to create a British bomb on a fraction of the American budget.

(G) "It was a huge intellectual feat," Andrew Nahum observes. "Essentially they reworked the calculations that they'd been doing in Los Alamos. They had the services of Klaus Fuchs, who [later] turned out to be an atom spy passing information to the Soviet Union, but he also had a phenomenal memory." Another British physicist, Patrick Blackett, who discussed the Bomb after the war with a German scientist in captivity, observed that there were no real secrets. According to Nahum he said: "It's a bit like making an omelette. Not everyone can make a good one." When Churchill was re-elected in 1951 he "found an almost complete weapon ready to test and was puzzled and fascinated by how Atlee had buried the costs in the budget", says Nahum. "He was very conflicted about whether to go ahead with the test and wrote about whether we should have 'the art and not the article'. Meaning should it be enough to have the capability... [rather] than to have a dangerous weapon in the armoury."

(H) Churchill was convinced to go ahead with the test, but the much more powerful hydrogen bomb developed three years later worried him greatly. HG Wells died in 1946. He had been working on a film sequel to *The Shape of Things To Come* that was to include his concerns about the now-realised atomic bomb he'd first imagined. But it was never made. Towards the end of his life, says Nahum, Wells's friendship with Churchill "cooled a little". "Wells considered Churchill as an enlightened but tarnished member of the ruling classes." And Churchill had little time for Wells's increasingly fanciful socialist utopian ideas.

(I) Wells believed technocrats and scientists would ultimately run a peaceful new world order like in *The Shape of Things To Come*, even if global war destroyed the world as we knew it first. Churchill, a former soldier, believed in the lessons of history and saw diplomacy as the only way to keep mankind from self-destruction in the atomic age. Wells's scientist acquaintance Leo Szilard stayed in America and campaigned for civilian control of atomic energy, equally pessimistic about Wells's idea of a bold new scientist-led world order. If anything Szilard was tormented by the power he had helped unleash. In 1950, he predicted a cobalt bomb that would destroy all life on the planet. In Britain, the legacy of the Bomb was a remarkable period of elite scientific innovation as the many scientists who had worked on weaponry or radar returned to their civilian labs. They gave us the first commercial jet airliner, the Comet, near-supersonic aircraft and rockets, highly engineered computers, and the Jodrell Bank giant moveable radio telescope.

(J) The latter had nearly ended the career of its champion, physicist Bernard Lovell, with its huge costs, until the 1957 launch of Sputnik, when it emerged that Jodrell Bank had the only device in the West that could track it. Nahum says Lovell reflected that "during the war the question was never what will something cost. The question was only can you do it and how soon can we have it? And that was the spirit he took into his peacetime science." Austerity and the tiny size of the British market, compared with America, were to scupper those dreams. But though the Bomb created a new terror, for a few years at least, Britain saw a vision of a benign atomic future, too and believed it could be the shape of things to come.

Reading Passage 3 has ten paragraphs, **A–J**.

Which paragraph contains the following information?

Write the correct letter, **A–J**, in boxes on your answer sheet. Note that one paragraph is not used.

1. Scientific success
2. Worsening relations
3. The dawn of the new project
4. Churchill's confusion
5. Different perspectives
6. Horrifying prediction
7. Leaving Britain behind the project
8. Long-term discussion
9. New idea