

2015

SUJET & CORRIGÉ

TEST D'ANGLAIS

CONCOURS
ECRICOME
TREMPIN 1 & 2

APRÈS
BAC+2/BAC+3/BAC+4

ESPRIT DE L'ÉPREUVE

Vous disposez d'un livret et d'une grille de réponse.

Ce livret est un questionnaire à choix multiple (Q.C.M.) comprenant quatre phases de 30 questions à résoudre approximativement en 20 minutes (durée précisée à titre indicatif, afin de gérer au mieux le temps de passation qui ne sera nullement chronométré) :

- 1^{re} phase : Structures
- 2^e phase : Expression écrite
- 3^e phase : Vocabulaire
- 4^e phase : Compréhension

Chaque phase est composée de questions de difficulté variable. Chaque question est suivie de 4 propositions notées A, B, C, D.

Une de ces propositions, et une seule, est correcte.

- Vous devez utiliser un feutre ou un stylo bille noir pour cocher la case correspondante à votre réponse.
- Vous avez la possibilité de ne noircir aucune réponse.
- Le correcteur blanc est interdit.

Vous devez porter vos réponses sur la grille unique de réponses.

TRÈS IMPORTANT

Travaillez sans vous interrompre. Si vous ne savez pas répondre à une question, ne perdez pas de temps : passez à la suivante.

Attention, ne répondez pas au hasard :

- Une bonne réponse vous rapporte 3 points ;
- Une mauvaise réponse vous coûte 1 point ;
- L'absence de réponse est sans conséquence (ni retrait, ni attribution de point).

SUJET

Section 1 – structures

This section tests your ability to identify appropriate forms of standard written English.

Directions: each question contains a sentence that is incomplete in some way. Beneath each sentence you will see four words or phrases, marked A, B, C and D. Choose the one word or phrase that best completes the sentence.

Example: John Le Carré _____ for his novels on espionage.

- A. famous C. his fame
B. is famous D. who is famous

The sentence should read, “John Le Carré is famous for his novels on espionage.” Therefore B is the correct answer.

Now begin work on the questions.

- If you've already ... in this chair, you know how comfortable it is.*
 - sitted
 - sit
 - sat
 - sits
- That store is just ... the road, but you need to go down to the stoplight to get to the other side.*
 - about
 - against
 - amidst
 - across

3. *Will you be relocating all ... to the new premises?*
- A. this equipment
 - B. these equipment
 - C. this equipments
 - D. these equipments
4. *Would you all please remember ... your books to class next week?*
- A. bringing
 - B. to bring
 - C. brings
 - D. bring
5. *No, Carol won't be alone: her dog accompanies her ... she goes.*
- A. forever
 - B. wherever
 - C. towards
 - D. alongside
6. *Until now, I didn't think things could get any*
- A. badder
 - B. baddest
 - C. worser
 - D. worse

7. *What a weekend this is: it ... pretty heavily non-stop since Friday!*

- A. had rained
- B. rained
- C. has been raining
- D. keeps raining

8. *If you ... me permission, I wouldn't have snuck out.*

- A. had given
- B. were to give
- C. have given
- D. gave

9. *It took me a fortnight to recover ... the flu.*

- A. of
- B. from
- C. with
- D. back

10. *My chrysanthemums are the only plants ... survived the freeze.*

- A. that
- B. whose
- C. who
- D. what

11. *They finally ... a solution to the problem last month.*

- A. seek
- B. seeked
- C. sook
- D. sought

12. *Hopefully, by Tuesday, the meeting's agenda will already ... set.*

- A. to be
- B. going to be
- C. have been
- D. been

13. *She really doesn't care ... anyone but herself.*

- A. of
- B. over
- C. from
- D. about

14. *I must have ... the door open, since it seems to be getting colder in here.*

- A. left
- B. leaven
- C. loft
- D. laughed

15. *With the sun, your hair is getting lighter*
- A. to lighter
 - B. to lightest
 - C. and lighter
 - D. and lightest
16. *We've decided to wait ... he makes the first move.*
- A. for
 - B. until
 - C. whence
 - D. up to
17. *When I was young, I ... to love fantasy stories, but now I prefer nonfiction.*
- A. used
 - B. am used
 - C. was to use
 - D. was used
18. *As soon as he got a new wallet, he ... out the old one.*
- A. thrown
 - B. throw
 - C. through
 - D. threw

19. *I have ... to meet someone who really understands me, but I haven't lost hope!*

- A. ever
- B. never
- C. yet
- D. since

20. *Would you please ... me know as soon as possible?*

- A. leave
- B. let
- C. allow
- D. permit

21. *I didn't sleep very well, since I was awoken several times ... the night.*

- A. for
- B. since
- C. during
- D. while

22. *I've just enrolled in a ... intensive art course.*

- A. four-weeks'
- B. four-weeks
- C. four-week's
- D. four-week

23. *We've decided to stay in tonight ... than going out.*

- A. whereas
- B. rather
- C. otherwise
- D. despite

24. *How ... is your swimming pool?*

- A. wide
- B. widely
- C. width
- D. much wide

25. *Instead ... parking here why don't you park over there?*

- A. to
- B. of
- C. from
- D. than

26. *The Christmas bonus is paid ... of position or length of service.*

- A. despite
- B. regardless
- C. although
- D. depending

27. *After so many surprises, I can certainly say that the day was ... !*
- A. painful
 - B. senseful
 - C. eventful
 - D. exciteful
28. *If you talked less, you ... get more work done.*
- A. might
 - B. dare
 - C. must
 - D. will
29. *I ... what I said when I told you this is the last time I'm going to explain this.*
- A. mean
 - B. mint
 - C. meant
 - D. mend
30. *Tom ... be coming tonight, but he won't be sure until later this afternoon.*
- A. can
 - B. may
 - C. would
 - D. shall

Section 2 – Written expression

Directions: the following sentences have four underlined words or phrases. the four underlined parts of sentence are marked a, b, c and d. identify the one underlined word or phrase that must be changed in order for the sentence to be correct.

Example: Fresh, green vegetables are an excellent source vitamins.

- A. Fresh C. an
B. vegetables D. source

The sentence should read, “Fresh, green vegetables are an excellent source of vitamins”. Therefore D is the correct answer.

Helen from marketing has had her baby! He is born yesterday at 11pm.

- A. from C. is born
B. hashad D. at 11pm

The sentence should read, “Helen from marketing has had her baby! He was born yesterday at 11pm”. Therefore C is the correct answer.

Now begin work on the questions.

31. Is there anything else that you would like have added to the programme?

- A. there
B. else
C. would
D. have added

32. To benefit from tutoring fully, you should plan of turning in one essay per week.

- A. benefit from
- B. plan of
- C. turning in
- D. per week

33. We usually are eating breakfast together before leaving for work in separate cars.

- A. are eating
- B. leaving
- C. for
- D. in

34. I'm sorry, but I've already promised to look after my friends dog this weekend.

- A. I've
- B. look after
- C. friends
- D. this

35. I really don't know if I believe about life after death.

- A. really
- B. if
- C. believe about
- D. after

36. Mr. Smith is the professor who's course led to that enormous controversy, last year.
- A. the
 - B. who's
 - C. led to
 - D. last year
37. Since Sarah's on our debate team, she'll be able to help us win with her vast knowledges.
- A. Since
 - B. on
 - C. to help
 - D. knowledges
38. I'm still going to take a year out, however my parents say.
- A. I'm
 - B. to take
 - C. however
 - D. say
39. The newspaper who is responsible for the leak has been closed down.
- A. who
 - B. for
 - C. has been
 - D. closed down

40. Among my worst experience ever is the time I had to ride my bike through the pouring rain.
- A. experience
 - B. ever
 - C. to ride
 - D. through
41. The bus drove by us this morning while we are walking up the street to the bus stop.
- A. drove by
 - B. while
 - C. are walking
 - D. up the street
42. I have studied English before moving to London, but I still make some mistakes.
- A. have studied
 - B. moving to
 - C. still make
 - D. mistakes
43. When you leave for your interview, do you expect me going with you?
- A. When
 - B. leave for
 - C. do you
 - D. going

44. *It's now official: the firm would soon merge with its main competitor.*
- A. It's
 - B. would
 - C. with
 - D. its
45. *You know how much I am enjoying the changing of the seasons, especially the onset of spring.*
- A. am enjoying
 - B. the changing
 - C. especially
 - D. of
46. *In the past few weeks, there have been a number of disrelated incidents.*
- A. past
 - B. there
 - C. a number of
 - D. disrelated
47. *While I finally got to the party, I discovered that most of the other guests had already gone home.*
- A. While
 - B. to
 - C. the other
 - D. gone

48. You really seem to be interested in the odd creatures that you find in the nature.
- A. to be
 - B. interested in
 - C. that
 - D. the nature
49. We've been granted two day grace concerning the due payment.
- A. granted
 - B. day
 - C. concerning
 - D. due
50. I propose of getting back to you once I have more information.
- A. propose of
 - B. back to
 - C. once
 - D. information
51. We need to stop to try to persuade them, since they clearly won't change their opinion.
- A. need
 - B. to try
 - C. to persuade
 - D. won't change

52. *These books may belong to you, but the bookcase is definitely my.*
- A. may
 - B. belong to
 - C. definitely
 - D. my
53. *We didn't must to clock in until 9:30 in the old days, but now we start at 9.*
- A. must
 - B. to clock in
 - C. days
 - D. start
54. *We do indeed want to warn them about the risks, but let's be careful not to scare them apart from the project.*
- A. indeed
 - B. to warn
 - C. let's be
 - D. apart
55. *My friend Lucy finally got her long awaited promotion on last week, so we're going to celebrate.*
- A. got
 - B. long
 - C. on last
 - D. we're going

56. *I would be interesting to look at the results of the latest survey.*
- A. interesting
 - B. look at
 - C. results
 - D. latest
57. *Going to bed late is making it difficult for you to get up at time for work.*
- A. Going to
 - B. to get up
 - C. at time
 - D. for work
58. *All back-office teams are being remarkably productive on the moment.*
- A. All
 - B. are being
 - C. remarkably
 - D. on
59. *Due to unforeseen events, the store will be shot throughout the weekend.*
- A. Due
 - B. events
 - C. shot
 - D. weekend

60. Do you really think all our luggages will fit in the boot?

- A. really
- B. luggages
- C. fit
- D. boot

Section 3 – Vocabulary

Directions: In this section, each question is a sentence with a word or phrase underlined. Below each sentence are four choices and you should select the one that has the closest meaning to the underlined word or phrase.

Example: It was not until the nineteenth century that a bridge was built over the river at Bordeaux.

- A. created C. constructed
B. prepared D. linked

Here the word “constructed” is closest in meaning to “built”, so C. is the best answer.

Now begin work on the questions.

61. *Liz is a valued team member because we can always rely on her to be innovative.*

- A. stand on
B. count on
C. stake upon
D. fall upon

62. *The point of this exercise is to understand the main claims being made.*

- A. detail
B. grade
C. trouble
D. aim

63. *If you don't dress appropriately you'll surely come down with a cold.*
- A. fall
 - B. find
 - C. catch
 - D. receive
64. *I bought a bunch of books at the local school fair.*
- A. assortment
 - B. request
 - C. catalogue
 - D. container
65. *Would you like to try out my new recipe before there's none left?*
- A. perfect
 - B. modify
 - C. sample
 - D. extract
66. *This is a thoroughly satisfying novel, full of adventure, humour and romance.*
- A. inevitably
 - B. amusingly
 - C. boringly
 - D. completely

67. My headstrong friend, Joe, has defied his family and booked a ticket to India.

- A. adventurous
- B. stubborn
- C. passionate
- D. resourceful

68. It's hard to believe he's the CEO, with his shaggy appearance.

- A. sharp
- B. dishevelled
- C. friendly
- D. intimidating

69. Do you think the company will reach this year's sales target.

- A. arrive at
- B. identify with
- C. aim for
- D. face up to

70. The firm's accounting troubles left stock investors jittery.

- A. jumpy
- B. confused
- C. elated
- D. intrigued

71. *The takeover has been remarkably swift considering the work involved.*

- A. skilled
- B. intensive
- C. prompt
- D. foolhardy

72. *He is beside himself with anger about losing out on this deal.*

- A. controlling
- B. finished
- C. vengeful
- D. overwhelmed

73. *Is it possible to postpone the meeting until we have finished this project?*

- A. put off
- B. put down
- C. go on with
- D. go over

74. *She was driving recklessly when she was stopped.*

- A. typically
- B. carefully
- C. wildly
- D. timidly

75. *If we agreed to an increased price, would you change the contract deadline?*
- A. delay
 - B. sub-clause
 - C. goal
 - D. due date
76. *Team members' performance is constantly monitored so as to improve productivity.*
- A. motivation
 - B. execution
 - C. temper
 - D. assessment
77. *We gathered from your application that you have 2 years of sales experience, is this correct?*
- A. expected
 - B. withdrew
 - C. required
 - D. understood
78. *Some find Jess conceited, but I think she's just trying to stand up to fierce competition.*
- A. insincere
 - B. arrogant
 - C. mean-spirited
 - D. irritating

79. *How rude: I can't believe how he lashed out at us like that!*

- A. attacked
- B. mocked
- C. tricked
- D. interrupted

80. *If you don't know him, it's easy to be unnerved by his steady gaze.*

- A. unfocused
- B. cagey
- C. unwavering
- D. bored

81. *I'm sure it was him, although he's never owned up to losing my phone.*

- A. coined
- B. agreed with
- C. admitted
- D. belonged to

82. *I hope we can stave off these complaints long enough to fix the problem.*

- A. repel
- B. save up
- C. release
- D. clear up

83. *The canteen is always crowded on Mondays.*

- A. barred
- B. packed
- C. dismal
- D. wedged

84. *As we progressively disentangled all the details involved, we came to realise this invention is fabulous!*

- A. stirred up
- B. summed up
- C. slipped out
- D. sorted out

85. *I'm sure Tony will have this done in no time.*

- A. at once
- B. in the end
- C. out of date
- D. for a change

86. *The commission conducting the sales practices probe released their report.*

- A. intervention
- B. enquiry
- C. investment
- D. debate

87. *He's always polite to me, but obnoxious to everyone else.*

- A. informal
- B. prejudiced
- C. odious
- D. unpredictable

88. *Her diagnosis doesn't account for the main difficulty we discussed.*

- A. threaten
- B. sustain
- C. return
- D. explain

89. *Our service comprises free delivery and 24/7 support.*

- A. advocates
- B. encompasses
- C. renders
- D. acknowledges

90. *Too much detail has been packed into these leaflets.*

- A. scribbled
- B. mixed up
- C. incorporated
- D. overlooked

Section 4 – Reading comprehension

Questions 91-98

The earliest automobiles were soon used to compete in races, but they weren't able to go very fast. At the first race on record, held in 1894, the winners' average speed was 17 kilometres per hour! Over the next decades, races sprouted up throughout Europe. But it wasn't until after World War Two that a framework for a world championship was formally established. That framework resulted in different "formulae" for races, each with their own rules. Among these, the Formula One (or "Formula A," as it was also initially known) was the highest class of single-seater racing (meaning it allowed the largest motors).

The first discussions about a world drivers' championship actually dated back to the late 1930s, but plans were shelved with the onset of the war. In 1946 the idea was rekindled, as Grand Prix races resumed after the wartime hiatus. The following year, the Fédération Internationale de l'Automobile was founded in Paris and the decision was officially made to launch a drivers' world championship. Over the next three years, the details were hammered out, and in May 1950 the first world championship race was held at Silverstone. Only seven of the twenty plus Formula One races that season counted towards the title but the championship had finally been launched.

During the early years, while ever more races were included in the championship, there were also still plenty of non-championship Formula One races. In later years, however, those non-championship races gradually began to disappear, as rising costs made them unprofitable. The last ever was held in 1983.

Another feature of those early years was an abundance of "privateers," meaning drivers who operated on their own and who bought and raced their own cars. Nevertheless, the formula was dominated at that time by teams organised by (mostly Italian) major pre-war automobile manufacturers, such as Alfa Romeo, Ferrari, Maserati and Mercedes Benz. Thanks to Giuseppe Farina and especially to his Argentine teammate and five-time title winner, Juan Manuel Fangio, the Alfa Romeo team won 6 of the first 8 championships. The two exceptions came in 1952 and 1953, with Alberto Ascari winning for Ferrari.

There was another particularity in the 1952 and 1953 races: the lack of entrants led authorities to allow Formula Two cars to compete alongside Formula One models. The automobiles that met the regulations for the first Formula One races were front-engined models, with narrow-treaded tyres and 1.5-litre supercharged or 4.5-litre normally aspirated motors. When Formula One returned to stricter regulations in 1954, engines were limited to 2.5 litres.

Even as rules attempted to make the sport safer and fairer, constructors developed various innovations over the years hoping to come out on top. Such innovations, alongside other considerations, frequently led in turn to new changes in Formula One rules, leading manufacturers to adjust and innovate yet again. One such major innovation was the move from front-engined to rear-engined designs, spearheaded by the innovative British manufacturer Cooper at the close of the 1950s. Another key innovator of the early 1950s was Mercedes Benz.

Despite the potential for glory, the cost of Formula One competition soon became too steep for most automanufacturers. The extreme danger of the sport was another important factor. In the first decade alone, 13 drivers were killed. In 1955, a more horrific disaster occurred at Le Mans: the crash of a Mercedes Benz there killed 83 spectators and the driver. This catastrophe led the manufacturer to withdraw entirely from motor sports. Of the 18 manufacturers that entered models in the 1950 race, Ferrari is the only team that has remained active to this day.

Source : « A Brief History of F1 » (l'auteur n'est pas spécifié sur la source), publié sur le site www.espnf1.com et toujours disponible à la page <http://en.espnf1.com/f1/motorsport/page/2642.html> « The story of the Grand Prix » (l'auteur n'est pas spécifié sur la source), publié sur le site www.grandprixhistory.org et toujours disponible à la page <http://www.grandprixhistory.org/story.htm>

91. *When were the initial rules for the Formula One established?*

- A. during the 1930s
- B. shortly after World War One
- C. in 1946
- D. between 1947 and 1950

92. *In what year was the resolution to establish a world championship for automobile drivers made official?*
- A. 1946
 - B. 1947
 - C. 1949
 - D. 1950
93. *This text asserts that non-championship Formula One races were discontinued because:*
- A. there were too many races to regulate effectively
 - B. manufacturers boycotted them
 - C. such races became too expensive to be lucrative
 - D. there was a shortage of drivers
94. *The preeminent force in the first years of Formula One competition was:*
- A. major car manufacturers
 - B. rear-engined models
 - C. privately owned vehicles
 - D. Italian drivers
95. *Formula Two cars were admitted to the Formula One for two years in the early 1950s because:*
- A. automobile manufacturers demanded this
 - B. there were not enough competitors
 - C. Formula Two cars were more popular with fans
 - D. this increased the safety of racing

96. *The return to Formula One regulations after two years of more lenient restrictions coincided with:*
- A. a lower limit on the size of engines
 - B. major developments by Mercedes Benz
 - C. a terrible accident killing many spectators
 - D. the introduction of rear-engined models
97. *What happened as a result of the incident at Le Mans?*
- A. Mercedes Benz made major developments.
 - B. Front-engined cars were introduced.
 - C. Privately owned vehicles no longer competed.
 - D. Mercedes Benz pulled out of racing.
98. *Innovations by manufacturers and changes in Formula One rules are presented here as:*
- A. having quickly abated after an initial flurry of change
 - B. causing great conflict in the racing community
 - C. having mutual influence on each other
 - D. evolving without regard to each other

Questions 99-105

Shoppers who take to the internet should start considering the environmental impact of internet shopping or “e-commerce,” according to the head of Toys R Us, a largely bricks-and-mortar retailer battling online rivals. “It’s very ungreen,” said Jerry Storch, Toys R Us chief executive, in a recent interview. Mr. Storch goes on to note that people are “just so enraptured with how cool it is that they can order anything and get it brought to their home that they aren’t thinking about the carbon footprint. But that will change.” Mr Storch was speaking ahead of the holiday shopping season, whose high point in the US after the Thanksgiving holiday has already been pre-empted by a rush of online offers.

The convenience of e-commerce and its threat to bricks-and-mortar stores have been well documented since Jeff Bezos founded Amazon in 1994, but questions about its environmental impact have gotten less public attention. On its website, Amazon claims: “The efficiencies of online shopping result in a greener shopping experience than traditional retailing.” But studies by academic and advocacy researchers have not reached such a definitive conclusion and rightly so.

Jason Mathers, a senior manager at the Environmental Defense Fund advocacy group, provides an important nuance that partially supports Mr. Storch’s position. “The details matter. There is not a simple answer. There are certain advantages that the e-commerce system could have, but doesn’t necessarily have.” Indeed, the energy use and carbon emissions of home delivery compared with store shopping depend on several factors: the vehicles used, the distance travelled, the number of products bought, failed deliveries, and returned goods. In other words, which approach to shopping is greener depends on the details of each consumer’s specific context.

A 2009 study from Heriot Watt University in Edinburgh, which approaches the problem from a broader statistical standpoint, tends to corroborate the net environmental benefits of e-commerce: “While neither home delivery nor conventional shopping has an absolute CO2 advantage, on average, the home delivery operation is likely to generate less CO2 than the typical shopping trip.” In the same year, a study at Carnegie Mellon University found that buying a flash drive from Buy.com cut energy use and CO2 emissions by an average of 35 per cent compared with traditional store shopping.

In response to such broad studies, Mr. Storch would rather focus on a single concrete example: “Driving a truck down a country lane in rural Connecticut to deliver a package is hardly the greenest way for product delivery to occur.” Aware of the economic importance of the phenomenon, Mr. Storch was quick to add, “I don’t mean to slam anyone.” It is easy to understand why: Toys R Us sold \$1bn of goods over the internet last year, making up 7% of total sales. “That’s what customers want,” he granted, but he foresees that “people are going to start realising, ‘Wait, I’m already taking my children to school. The store is right there. I can just pick it up.’”

Timothy Kenyon, director of GfK’s Green Gauge survey, points out that a small segment of consumers – often affluent, educated women – are willing to alter their behaviour based on environmental concerns. Another small segment would never do so, but a large group in the middle could be persuaded by practical arguments. “If you can link green messages to something pragmatic like ‘It’s going to save you money,’ then on a mass scale you might see more pick-up,” Mr. Kenyon noted.

With advances in smartphones, store IT systems and logistics, new shopping options are not only becoming available, but also increasingly easy and economical. A major shift in trends is already underway, but those concerned about the environment may need to focus more on details in helping consumers choose the greenest option, since the true impact of their choices will depend on the specifics of their own situation.

Source: « Toys R Us Boss Hits at Online Shopping » (adapté), par Barney Jopson, publié sur le site Web du Financial Times, (www.ft.com), le 18 novembre 2012.

99. As described here, the relationship of Mr. Storch’s company to online competitors is:

- A. dominating
- B. confrontational
- C. unaffected
- D. cooperative

100. *According to Mr. Storch's comments quoted in this text, e-commerce:*

- A. will help stores become more environmentally friendly
- B. provides the majority of his company's revenue
- C. is worse for the environment than most people realise
- D. will cause companies like his to disappear

101. *Jason Mathers provides a nuance that concerns:*

- A. judging whether e-commerce or store shopping is greener
- B. the validity of data quoted in academic studies
- C. the factors that lead to consumers changing behaviour
- D. technology's role in preserving the environment

102. *As concerns limiting impact on the environment, the author of this text asserts that:*

- A. e-commerce is better than store shopping
- B. store shopping is better than e-commerce
- C. more scientific studies are needed on the topic
- D. the best shopping option depends on the situation

103. *The Heriot Watt study found that online shopping generated less CO₂ than store shopping:*

- A. on an overall average
- B. in the vast majority of cases
- C. less than half of the time
- D. depending on the region

104. *According to Timothy Kenyon, many consumers might be led to change how they shop by:*

- A. quoting scientific studies
- B. offering gifts such as free smartphones
- C. pointing out how they benefit
- D. developing more nuanced arguments

105. *In this text, Mr. Mathers and the Heriot Watt study both point out that:*

- A. e-commerce is unconditionally greener than store shopping
- B. neither e-commerce nor store shopping is greener in all cases
- C. scientific studies are incapable of accounting for details
- D. e-commerce would be greener if it were less technological

Questions 106-112

Sumo reigns supreme as the favourite traditional national sport of Japan. With the growth of its popularity outside of Japan there have also been changes. The most recent Grand Champion is a wrestler named Akebono, a Hawaiian who took up the sport at a young age and excelled in it. Due to Akebono's success, more international competitors are entering the ring, all aware of their participation in a sport that is older than most of the countries they come from.

The Kojiki, the oldest extant chronicle in Japan (from the year 712), holds the earliest written mention of Sumo. It relates a legend about how possession of the Japanese islands was determined by a Sumo match 2,500 years ago between the gods Takemikazuchi and Takeminakata. The two grappled on the shores of Izumo along the Japan Sea coast until the latter finally lost. This, the legend goes, is how control of the archipelago was ceded to the Japanese people, led by Takemikazuchi. Thus, from its inception Sumo was different from most other sporting events, with each match being a sort of historical recreation of a shared story of national origin.

Since the Japanese didn't keep any written records until the 8th century, it is impossible to know, aside from legend, exactly when Sumo first developed in Japan. However, ancient wall paintings indicate that its origins are very old. In prehistoric times, it appears Sumo was performed mainly as an agricultural ritual to pray for a good harvest, much like the indigenous peoples of North America and elsewhere developed performances and rituals soliciting their gods to ensure the earth's bounty.

The Nihon Shoki, from 720, records the first bout between lowly mortals as taking place in 23 BC. In its early days, Sumo appears to have been particularly violent, with no holds barred.

Sumo has few rules. The objective is to toss your opponent out of a 4.55m ring. Upon entering that ring, salt is tossed around it to purify the space. Sumo still strongly holds to its religious roots, with each wrestler asking for the help of the gods to win the battle. The winner shows no expression of joy or adulation.

The enormous size of wrestlers is mainly achieved through a rice-rich diet. The heavier the fighter, the lower his centre of gravity, making him harder to push or toss out of the ring. The Grand Champions weigh many hundreds of pounds while the younger and newer fighters are slim in

appearance.

A referee and several judges watch the action to call the winner. The bouts are brief, averaging only a few seconds. The combatants are banned from pulling hair, gouging eyes, or striking with a closed fist. Pushing, tripping, slapping and various body throws are commonly seen in Sumo. Much of Sumo is mental warfare and the art of the sport often amounts to winning a bout before the first move is even made.

Source : « Sumo Wrestling History, The Ancient Japanese Sport » (adapté – l’auteur n’est pas spécifié sur la source), publié sur le site www.essortment.com et toujours disponible à la page <http://www.essortment.com/sumo-wrestling-history-ancient-japanese-sport-21863.html>

106. Which one of the following is allowed in Sumo?

- A. shoving
- B. hair pulling
- C. punching
- D. scratching eyes

107. According to legend, Sumo:

- A. was brought to Japan by itinerant salt traders
- B. was initially reserved for older athletes
- C. decided a divine conflict over land possession
- D. served as a means for divine punishment

108. Which of the following is cited here as a similarity between Sumo and Native American culture?

- A. the lack of written records about their culture
- B. the use of ceremonies for their gods’ help with crops
- C. the link between competitions and national origin legends
- D. the detailed depiction of sporting events in wall paintings

109. *Salt is used in Sumo for:*

- A. traction
- B. decoration
- C. sliding
- D. cleansing

110. *Sumo wrestlers become very heavy in order to:*

- A. raise their centre of gravity
- B. be harder to force out of the ring
- C. reduce their risk of injury
- D. show respect for the gods' bounty

111. *The recent change to Sumo culture noted in this text concerns:*

- A. the internationalization of the sport
- B. changes in the diet of wrestlers
- C. growth in its popularity within Japan
- D. the decreasing age of contenders

112. *In qualifying early Sumo as being "no holds barred," the author means that the sport was:*

- A. very difficult to master
- B. mainly about gripping opponents
- C. complex in its rules
- D. ruthless for contenders

Questions 113-120

Using infrared data from the Subaru Telescope in Hawaii, astronomers have located a “super-Jupiter” around the bright star Kappa Andromedae, making it the most massive star known to host a directly imaged planet or lightweight “brown dwarf” companion. The newly discovered object, designated Kappa Andromedae b (Kappa And b, for short), has a mass that’s 12.8 times greater than Jupiter’s. This places it teetering on the dividing line between the most massive planets and the lowest-mass brown dwarfs. That ambiguity is one of the object’s charms, say researchers, who have dubbed it a super-Jupiter precisely to embrace both possibilities.

The star itself, Kappa Andromedae, is about 170 light years away and big enough to be seen by the naked eye from Earth. The object Kappa And b revolves around that star at roughly twice the distance from which Neptune orbits the sun. The newly located object glows a reddish colour, which would have been impossible to see through the glow of the nearby star if astronomers hadn’t used a special technique. But now that scientists have seen it, they’re not quite sure what it is!

“According to conventional models of planetary formation, Kappa And b falls just shy of being able to generate energy by fusion, at which point it would be considered a brown dwarf rather than a planet,” notes Michael McElwain, a member of the discovery team at NASA’s Goddard Space Flight Center in Greenbelt, MD. “But this isn’t definitive, and other considerations could nudge the object across the line into brown dwarf territory.”

Brown dwarfs are objects whose mass lies in between that of the largest planets and that of the smallest stars. They can be considered “failed stars,” in that they cannot sustain fusion. Fusion is the process by which atomic nuclei combine, releasing a huge amount of energy, including in the form of light. Fusion is what makes stars. Planets, on the other hand, do not produce any energy through fusion, though they can emit heat that is left over from their own formation.

The sun produces energy by fusing the common form of hydrogen into helium. Because their mass permits it, some brown dwarfs (unlike planets) achieve fusion. In such cases, they fuse deuterium, a heavier form of hydrogen gas, but (unlike stars) their fusion halts, leaving them to cool and darken steadily. While still luminous, brown dwarfs are much dimmer than stars and would appear magenta to our eyes. If it should be deemed a brown dwarf, Kappa Andromedae b would lie at the very

bottom of the scale of possible masses for brown dwarfs (which generally fall between 13 and 75 times the mass of Jupiter).

The research that led to the discovery of Kappa And b comes from a five-year effort called the Strategic Explorations of Exoplanets and Disks with Subaru (SEEDS). What sort of object this new find is, will surely be a continued subject of discussion, but seeing it at all already constitutes a spectacular feat. More than 800 planets are known to orbit other stars, but the methods used to find the vast majority of them are indirect: we see their effect on their stars, but we don't see the planets themselves. To see Kappa And b, astronomers used a technique permitting them to "blot out" the light from the nearby star, allowing the dimmer glow of the orbiting object to be captured in an image through the Subaru telescope. Additionally, Kappa And b's star is relatively young, at about 30 million years old (for comparison, the sun is roughly 5 billion years old). These clues point toward a formation story more typical of smaller planets.

Source: « *Astronomers Take a Picture of a Planet Orbiting Another Star* » (adapté), par Phil Plait, publié sur le site *Slate.com* (www.slate.com) le 19 novembre 2012.

113. *The text states that, compared to Jupiter, Kappa Andromedae b:*

- A. is an older object
- B. has a narrower orbit
- C. is more massive
- D. emits less light

114. *Kappa Andromedae b is "teetering" on the line between being:*

- A. a star or a brown dwarf
- B. a brown dwarf or a planet
- C. a glowing or a lightless object
- D. inside a star's galaxy or outside of it

115. *According to Mr. McElwain, Kappa Andromedae b is currently considered:*

- A. a large planet
- B. a large brown dwarf
- C. a small brown dwarf
- D. neither a planet nor a brown dwarf

116. *The text notes that brown dwarfs are different from planets because brown dwarfs:*

- A. do not emit heat
- B. are duller and chillier than planets
- C. have a wider orbit
- D. have enough mass for fusion

117. *Brown dwarfs are also seen as:*

- A. energy consumers
- B. failed stars
- C. a specific type of planet
- D. former planets

118. *The text says that Kappa And b can be seen:*

- A. by capturing the image from space via the SEEDS satellite
- B. through two telescopes used conjointly
- C. with a telescope, while blocking Kappa Andromedae's light
- D. with the naked eye, unaided by equipment

119. *Mr. McElwain says that Kappa And b might soon:*

- A. stop glowing
- B. be considered a brown dwarf
- C. become more massive
- D. move its orbit closer to other brown dwarfs

120. *According to the text, most of the 800 other newly discovered star-orbiting planets:*

- A. have been seen only from outer space
- B. have turned out to be brown dwarfs
- C. have been found in the same way as Kappa And b
- D. have been detected only through their effects