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## General Knowledge 0.4 For Pin Number 6

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### Abstract

This work presents 38 number of cards from different disciplines focused on english, physics and mathematics subject. The jester cards are extraneous, Provocative, Brusque, Momentum, Fraction Addition Formula and Equation of a circle.

## 1 መግቢያ

አሁን ባለንበት ዘመን የአንባቢያን ማህበረሰብ እየቀነሰ መምጣት አሳሳቢ ደረጃ ላይ ደርሷል። በብዙ ምክኒያት ሰዎች ቁጭ ብለው ማንበብ የተውበት ጊዜ ነው። ለምሳሌ ጠቃሚ ያልሆነ ሶሻል ሚዲያ ላይና በአልባሌ ቦታወች ጊዜን ማጥፋት ከብዙወቹ ትንሾቹ ምክኒያቶች ናቸው። በ2017 ዓ.ም ዳኛቸው ለዚህ የሚሆን መፍትሄ ብሎ ያቀረበው 0 ወይም 1 ጫዋታ በሚል ርእሰ የተዘጋጀ ትልቅ አክሲዮን ማህበር አለ። ይህ አክሲዮን ማህበር ከላይ የተጠቀሰውን ችግር በሚከተሉት መልኩ መፍታት ይቻላል ብሎ ያምናል። በዚህ ዕሁፍ ውስጥ የተካተተው መፍትሄ አሳማኝ ሆኖ አግኝተነዋል (ለበለጠ መረጃ የ 0 ወይም 1 መመስረቻ ዕሁፍን ይመልከቱ)። በዚህ አክሲዮን ማህበር የቀረበውን መፍትሄ ባጭሩ እንደሚከተለው አስቀምጠነዋል።

- (1) ማንበብን ወይም ጥናትን መዝናኛና ገንዘብ ማግኛ እንዲሁም ደግሞ ሽልማት የሚያስገኝ ማድረግ። ከማግኛ ወይም እዲስ እውቀትን ከማግኛ ዘዴወች ውስጥ አንደኛው ነገሮችን በተመሳሳይነታቸው በማዛመድ ማወቅ ነው። ለምሳሌ የአንድ እንግሊዘኛ ቃል ብዙ ተመሳሳይ ቃላቶች አሉት። እነሱን በማዛመድ

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ለመሸምደድ መሞከር ጥሩ ከሚባሉት ዘዴዎች ውስጥ አንዱ ነው። ግን ደግሞ ይሄን ልምምዶችን አይረሱ ለማድረግ በጨዋታ መልክ ሆኖ በቡድን እየተዝናኑና እየተወያዩ ሲሆን ተመራጭ ያደርገዋል። ካርድ በማዘጋጀት የእንግሊዘኛ ቃላቶችን ማጥናት በሚል ዙሪያ የተጠኑ ሳይንሳዊ ጥናቶች አሉ (ለምሳሌ፣ እነዚህን ይመልከቱ፣ [1, 2, 3, 7, 9, 10, 11, 12, 13, 15])

- (2) ነገሮችን በአይነት አይነታቸው እያዛመዱ ማወቅ ያመራምራል፣ ጠያቂ ያደርጋል፣ ከጓደኛ ጋር ያከራክራል፣ ማመሳከሪያ መፅሃፍ ፍለጋ እስከመሄድ ድረስ ያደርሳል። እናም በዚህ መልክ ሲሆን ያን ነገር ለመርሳት ብዙ ጊዜ ይጨርሳል።
- (3) ማዛመዱን ደግሞ ከጓደኛ ጋር ሆነው እየተዝናኑ በጨዋታ መልክ ካደረጉትና እውቀትንና ማወቅን ለማበረታት ደግሞ ለአሸናፊው ጉርሻ በመስጠት ከሆነ ጨዋታውም ተወዳጅ ይሆናል ማለት ነው።
- (4) ከላይ ከ1-3 የተጠቀሱትን መፍትሔዎች ለማከናወን የተለያዩ አይነት አዝናኝ ጨዋታዎችን ማዘጋጀት።

በዚህ ወረቀት ውስጥ፣ ለ 0 ወይም 1 ጨዋታ የሚሆን ካርድን አዘጋጅተናል። ያዘጋጀነው ካርድ ለጠቅላላ እውቀት 0.4 የሚሆን ሲሆን ከዚህ በፊት ያልተዘጋጁ ካርዶችን የሚዳስስ ነው። ያዘጋጀነውን የካርዶችን መረጃ ባጭሩ እንደሚከተለው ገልፀንዋል። የመርፌ ብዛት=6 እና  $k=4$  ቢሆኑ። ስለዚህ  $n=8*4+6=38$  ይሆናል። ስለዚህ አጫዋች ካርዶችን ጨምሮ ባጠቃላይ 38 ካርዶች አሉ። ተጫዋች ካርዶች፣  $38 - 6 = 32$  ካርዶች ይሆናሉ፤ 32 ደግሞ የ 8 ብዜት ነው (ለበለጠ መረጃ የዜሮ ወይም አንድ መመስረቻ ፅሁፍን ይመልከቱ)። አጫዋች ካርዶች የሚከተሉት ናቸው፤ extraneous፣ Provocative፣ Brusque፣ Momentum፣ Fraction Addition Formula እና Equation of a circle ናቸው።

## 2 አጫዋች ካርዶች (Jester Cards)

**Definition 2.1** (Extraneous). *Something that is not essential or relevant to the matter at hand. (see, [4]).*

*Example:* In solving the equation , the solutions are valid, but if we square both sides of an equation like and get , the solution would be extraneous.

**Definition 2.2** (Provocative). *Causing a strong reaction, often in a deliberate way; intended to stimulate thought, debate, or controversy. (see, [5]).*

*Example:* A provocative article questioning the validity of established scientific theories may spark debate in the academic community.

**Definition 2.3** (Brusque). *Abrupt, blunt, or curt in manner or speech, often perceived as rude. (see, [8]).*

*Example:* When asked about the project’s progress, his brusque reply was, “It’s done. Stop asking.”

**Definition 2.4** (Momentum). *In physics, momentum is the product of an object’s mass and velocity, given by . More generally, it refers to the force or energy gained by a moving object or idea. (see, [6]).*

*Example:* A moving car of mass 1 kg traveling at 3 m/s has a momentum of 3kg(m/s).

**Definition 2.5** (Fraction Addition Formula). *The sum of two fractions  $\frac{a}{b}$ ,  $\frac{c}{d}$  (where  $b, d \neq 0$ ) is given by:*

$$\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}.$$

Example:

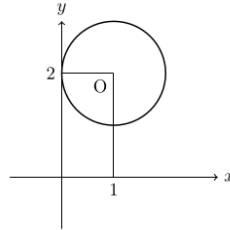
$$\frac{1}{2} + \frac{3}{4} = \frac{(1 \times 4) + (3 \times 2)}{2 \times 4} = \frac{4 + 6}{8} = \frac{10}{8} = \frac{5}{4}.$$

**Definition 2.6** (Equation of a circle). *The equation  $(x - h)^2 + (y - k)^2 = r$  represents a circle centred at  $(h, k)$  with radius  $r$  (see, [14]).*

Example: The equation  $(x - 1)^2 + (y - 2)^2 = 1$  represents a circle centred at  $(1, 2)$  with radius 1.

### 3 ተጫዋች ካርዶች ከነገላጫዎቻቸው (Player Cards with their Jester)

1. extraneous=irrelevant=unrelated=unconnected=inapplicable=peripheral=immaterial.
2. provocative=annoying=irritating=goading=vexing=galling=exasperating.
3. brusque=curt=abrupt=blunt=short=sharp=terse=brisk=crisp=clipped=monosyllabic=indelicate=tactless=offhand=snappish=peremptory.
4. momentum=(mass)x(velocity)=the force required to bring the object to a stop in a unit length of time.
5.  $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$ ,  $b, d \neq 0$ .
6.  $(x - 1)^2 + (y - 2)^2 = 1$ =unit circle centered at  $(1, 2)$ =See Figure 1 below.



**Figure 1:** Circle centered at the  $(1, 2)$  with radius 1.

## References

- [1] Aslan, Y. “Teaching vocabulary effectively through flashcards”. *International Journal of Arts & Sciences* 4.11 (2011), p. 347.
- [2] Azabdaftari, B. and Mozaheb, M. A. “Comparing vocabulary learning of EFL learners by using two different strategies: Mobile learning vs. flashcards.” *The Eurocall Review* 20.2 (2012), pp. 47–59.

- [3] Bryson, D. "Using flashcards to support your learning". *Journal of visual communication in medicine* 35.1 (2012), pp. 25–29.
- [4] Dictionary, M.-W. "Merriam-webster". *On-line at <http://www.mw.com/home.htm>* 8.2 (2002), p. 23.
- [5] Dictionary, O. E. "Oxford english dictionary". *Simpson, Ja & Weiner, Esc* 3 (1989).
- [6] Halliday, D., Resnick, R., and Walker, J. *Fundamentals of physics*. John Wiley & Sons, 2013.
- [7] Kosim, N. "Improving the students' vocabulary mastery through flashcards". *Jurnal Pendidikan dan Pembelajaran* 2.9 (2013).
- [8] Miller, J. E. and Brown, E. K. *The Cambridge dictionary of linguistics*. Cambridge University Press, 2013.
- [9] Nikoopour, J. and Kazemi, A. "Vocabulary learning through digitized & non-digitized flashcards delivery". *Procedia-Social and Behavioral Sciences* 98 (2014), pp. 1366–1373.
- [10] Nugroho, Y. S., Nurkamto, J., and Sulistyowati, H. "Improving students' vocabulary mastery using flashcards". *English Education* 1.1 (2012), pp. 1–15.
- [11] Saputri, T. and Ramli, A. mardila. "Improving vocabulary mastery through flashcards in Sartika kindergarten Surabaya". *International Conference on English Language Teaching (ICONELT 2017)*. Atlantis Press. 2017, pp. 214–218.
- [12] Senzaki, S., Hackathorn, J., Appleby, D. C., and Gurung, R. A. "Reinventing flashcards to increase student learning". *Psychology Learning & Teaching* 16.3 (2017), pp. 353–368.
- [13] Sitompul, E. Y. "Teaching vocabulary using flashcards and word list". *Journal of English and Education* 1.1 (2013), pp. 52–58.
- [14] Stewart, J. *Calculus: early transcendentals*. Cengage learning, 2012.
- [15] Wahyuni, S. and Yulaida, H. "Flashcards as a means to improve EFL learners' vocabulary mastery". *JEELS (Journal of English Education and Linguistics Studies)* 1.1 (2014), pp. 47–61.