



Coimisiún na Scrúduithe Stáit

# TEICNEOLAÍOCHT

Scrúdú an Teastais Shóisearaigh, 2008

**ARDLEIBHÉAL**

200 Marc

Dé Céadaoin, 18 Meitheamh, Tráthnóna, 2:00 go dtí 4:00

## ROINN A

### TREORACHA

1. Freagair Roinn A (ceisteanna gearrfhreagra). 100 marc
2. Freagair **(a)** nó **(b)** i gcás **gach** ceist i Roinn B. 50 marc
3. Freagair ceist **amháin** as Roinn C. 50 marc
4. Tabhair an páipéar seo don Fheitheoir ag deireadh an scrúdaithe, i dteannta na leathán freagartha do Roinn B agus Roinn C.

Uimhir Ionaid

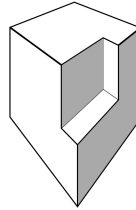
Scrúduimhir

Don Scrúdaitheoir	
Marc Iomlán	
<b>Ceist</b>	<b>Marc</b>
<b>Roinn A</b>	
<b>Roinn B</b> C1 (a)	
(b)	
C2 (a)	
(b)	
<b>Roinn C</b> C3	
C4	
C5	
C6	
<b>Iomlán</b>	
<b>Grád</b>	

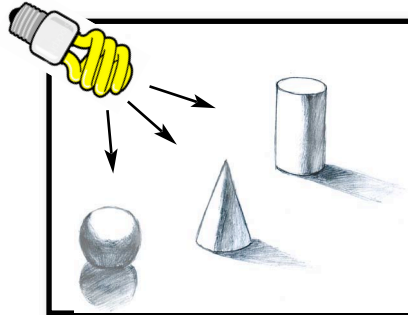
DÉAN DEIMHIN DE DO SCRÚDUIMHIR A SCRÍOBH SA BHOSCA  
ATÁ ANN DI AR AN LEATHANACH SEO.

1. Cuir in iúl go soiléir conas na pointí téaltaithe a aimsiú sa sceitse a thaispeántar.

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2. Sainaithin dhá chineál rindreála a úsáidtear sa sceitse a thaispeántar.



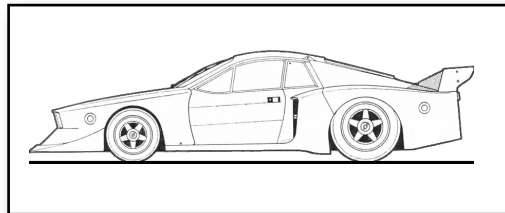
(i): \_\_\_\_\_

\_\_\_\_\_

(ii): \_\_\_\_\_

\_\_\_\_\_

3. Luaigh dhá bhuntáiste a bhaineann le CAD chun líníocht a dhéanamh.



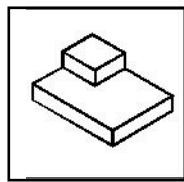
(i): \_\_\_\_\_

\_\_\_\_\_

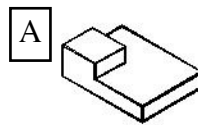
(ii): \_\_\_\_\_

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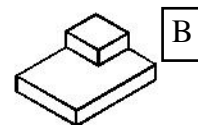
4. Cé acu ceann de na clónna A, B nó C atá ina chló rothlaithe den iomhá X?



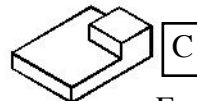
X



A



B



C

Freagra: \_\_\_\_\_

5. Abair cad is ciall le gach ceann de na siombailí faoi seach a thaispeántar.



X



Y

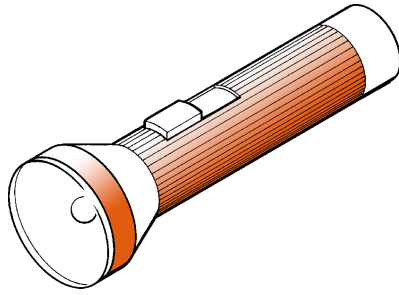
X: \_\_\_\_\_

\_\_\_\_\_

Y: \_\_\_\_\_

\_\_\_\_\_

6. Ainmnigh **dhá** thiontú fuinnimh a tharlaíonn nuair a chastar air an tóirse atá á oibriú ag cadhnra.



Ó: \_\_\_\_\_

Go: \_\_\_\_\_

Ó: \_\_\_\_\_

Go: \_\_\_\_\_

7. Luaigh **dhá** réamhchúram is gá a chomhlíonadh chun nach mbrisfidh leathán aicrileach ina phíosáí nuair a bhíonn poll á dhruileáil sa leathán.



(i): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(ii): \_\_\_\_\_

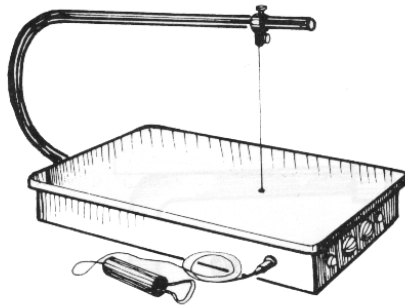
\_\_\_\_\_

\_\_\_\_\_

8. Sainaithin an trealamh a thaispeántar

*agus*

sainaithin an t-ábhar a dheilbhítear leis an trealamh seo.



Trealamh: \_\_\_\_\_

\_\_\_\_\_

Ábhar: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

9. Luaigh buntáiste amháin

*agus*

míbhuntáiste amháin a bhaineann le druilire den chineál a thaispeántar a úsáid.



Buntáiste: \_\_\_\_\_

\_\_\_\_\_

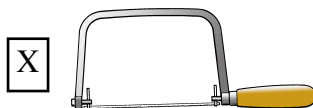
\_\_\_\_\_

Míbhuntáiste: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

10. Sainaithin an dá chineál sáibh a thaispeántar ag 'X' agus ag 'Y'.



X: \_\_\_\_\_

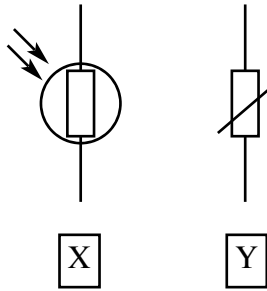
\_\_\_\_\_



Y: \_\_\_\_\_

\_\_\_\_\_

11. Ainmnigh na combhail leictreonacha a seasann na siombailí a thaispeántar dóibh.



X: \_\_\_\_\_  
 \_\_\_\_\_  
 Y: \_\_\_\_\_  
 \_\_\_\_\_

12. Sainaithin an geata loighice a thabharfaidh an tábla fírinne a thaispeántar.

Tábla Fírinne

Ionchur 1	Ionchur 2	Aschur
1	1	0
1	0	1
0	1	1
0	0	1

Geata Loighice: \_\_\_\_\_

13. Luaigh an dá fheidhm is féidir a bheith ag trasraitheoir i gciorcad.



(i): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 (ii): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

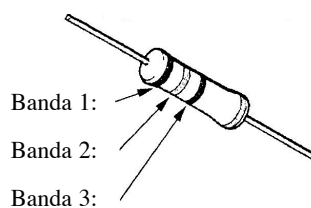
14. Luaigh dhá fheidhm a bhaineann le hilmhéadar, atá cosúil leis an gceann a thaispeántar.



(i): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 (ii): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

15. Bain úsáid as an tábla a thaispeántar agus luaigh dath an tríú banda i ngach ceann faoi seach de na friotóirí seo a leanas:

Dath	Luach
Dubh	0
Donn	1
Dearg	2
Oráiste	3
Buí	4
Glas	5
Gorm	6
Vialait	7
Liath	8
Bán	9



Freagra:

(a) 10 k,

(a) : \_\_\_\_\_

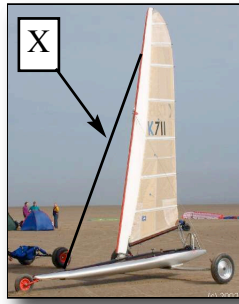
(b) 300 Ω.

(b) : \_\_\_\_\_

16. Taispeánann an sceitse luamh talún. Ainmnigh an príomhfhórsa a ghníomhaíonn ar an stagh solúbtha 'X',

agus

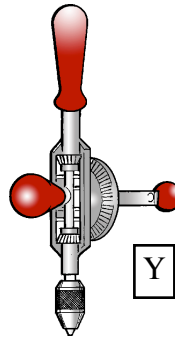
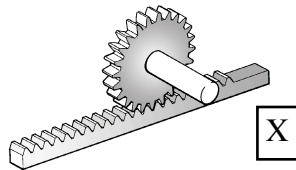
ainmnigh ábhar oiriúnach éadrom do chabhail an luaimh.



Fórsa: \_\_\_\_\_  
 \_\_\_\_\_

Ábhar: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

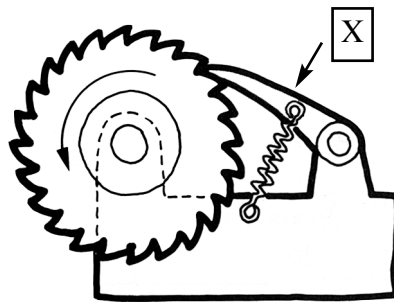
17. Sainaithin na meicníochtaí a thaispeántar ag 'X' agus ag 'Y'.



X: \_\_\_\_\_  
 \_\_\_\_\_

Y: \_\_\_\_\_  
 \_\_\_\_\_

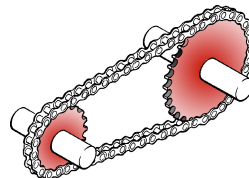
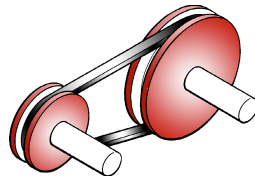
18. Ainmnigh an pháirt marcáilte 'X' agus luaigh a feidhm.



Ainm: \_\_\_\_\_  
 \_\_\_\_\_

Feidhm: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

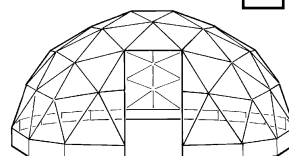
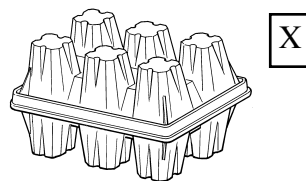
19. Luaigh **dhá** chúis bhféadfaí córas creasa a úsáid i meicníocht in ionad córas slabhra.



(i): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(ii): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

20. Sainaithin an dá chineál struchtúir a úsáidtear san ubh-bhosca ag 'X' agus sa chruinneachán ag 'Y'.



X: \_\_\_\_\_  
 \_\_\_\_\_

Y: \_\_\_\_\_  
 \_\_\_\_\_

21. Luaigh **dhá** chúis ar cheart buidéil phlaisteacha a athchúrsáil.



(i): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(ii): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

22. Sainaithin **dhá** fheiste stórála sonraí is féidir a úsáid le ríomhaire.



(i): \_\_\_\_\_

\_\_\_\_\_

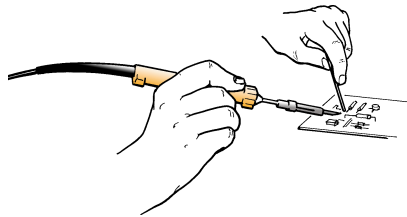
\_\_\_\_\_

(ii): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

23. Luaigh **dhá** réamhchúram sábháilteachta is gá a chomhlíonadh nuair a bhítear ag sádráil.



(i): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(ii): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

24. Ainmnigh an **tionscnóir** nua-aimseartha a rinne an chéad fholúsghlantóir gan mhálaí,

*agus*

ainmnigh **aireagán** a luaitear le Alexander Graham Bell.



Tionscnóir: \_\_\_\_\_

\_\_\_\_\_

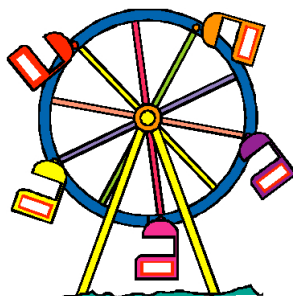
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Aireagán: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

25. Luaigh gné shábháilteachta amháin is ceart a chur san díreamh i ndearadh sa bhréagán den roth Ferris a thaispeántar.



(i): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(ii): \_\_\_\_\_

\_\_\_\_\_

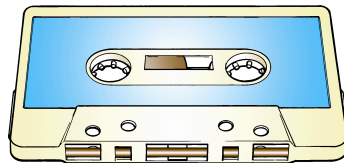
\_\_\_\_\_

26. Liostaigh **dhá** airí atá le fáil i bhfabraicí a dhéanann an duine nach bhfuil le fáil i bhfabraicí nádúrtha.



(i): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
(ii): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

27. Luaigh **dhá** chúis nach mbaintear úsáid fhorleathan a thuilleadh as caiséid fhuaimne le haghaidh taifeadtaí ceoil.



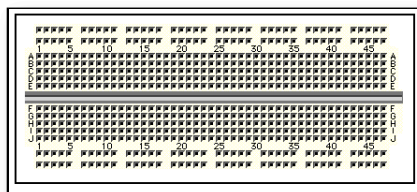
(i): \_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_  
(ii): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

28. Déan cur síos ar **dhá** bhealach inar chuir an teicneolaíocht fad le beatha seilfé táirgí bia.



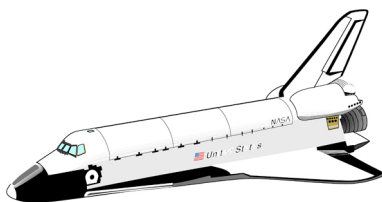
(i): \_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_  
(ii): \_\_\_\_\_  
\_\_\_\_\_  
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29. Sainaithin an rud a thaispeántar agus luaigh go soiléir an fáth a n-úsáidtear é.



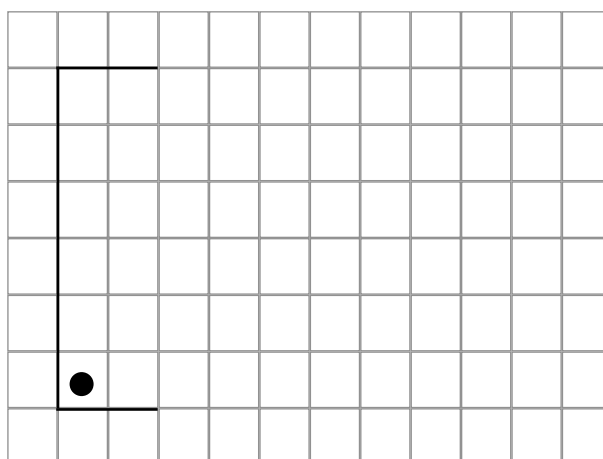
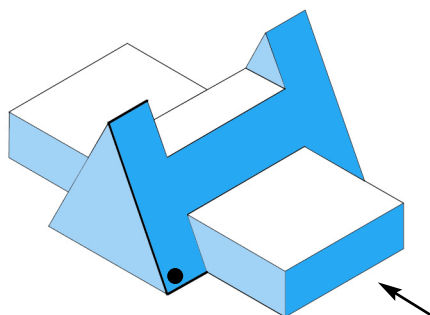
Rud: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Úsáid: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

30. Luaigh cúis **amháin** arbh éigean ábhair nua a fhorbairt chun an tointeálaí spáis a dhéanamh.



Cúis: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

31. Críochnaigh an taobhchló den pháirt a thaispeántar.



32. Críochnaigh forbairt na sleasa ar an gcoimeádán deisce a thaispeántar. Ar heicseagán rialta atá sé bunaithe.

