Experiment

A2-1

Icelandic (Iceland)

Lögmál Wiedemanns og Franz - Svarblað

Hluti A: Rafleiðni kopars, áls og látúns (1,5 stig)

A.1 (1.0 pt)

Falltími síseguls:

Númer	Kopar	Ál	Látún

A.2 (0.5 pt)

	Kopar	Ál	Látún
Rafleiðni			

Hluti B: Varmaleiðni kopars (3,0 stig)

B.1 (0.1 pt)

Stöng 1 hitastig :

B.2 (0.5 pt)

B.3 (0.1 pt)

P =

B.4 (0.5 pt)

Tími	T_1	T_2	T_3	T_4	T_5	T_6	T_7	T_8

B.5 (1.0 pt)
Gerðu graf (á millimetrapappírinn) af hitastigi sem fall af staðsetningu.

B.6 (0.5 pt)

$\kappa_0 =$

$\frac{\Delta T}{\Delta t} =$

B.7 (0.3 pt)

Teiknaðu hring um rétta svarið:

$\kappa > \kappa_0$ or $\kappa < \kappa_0$ or $\kappa = \kappa_0$

Hluti C: Mat á varmatapi og eðlisvarma kopars (4,0 stig)

C.1 (1.0 pt)

C.2 (1.0 pt)

C.3 (1.0 pt)
Expression:

$c_p =$

$P_{loss} =$

Value:

$c_p =$

$P_{loss} =$

C.4 (1.0 pt)
Jafna:

$\kappa_{kopar} =$

Gildi:

$\kappa_{kopar} =$

Hluti D: Mæling á varmaleiðni látúns og áls (1,0 stig)

D.1 (0.1 pt)

Stöng 2 : $T =$

D.2 (0.2 pt)

Tími þegar aflestur fór fram :

T_1	T_2	T_3	T_4	T_5	T_6	T_7	T_8

$\Delta T_{Kopar-1}/\Delta x$	$\Delta T_{Ltn}/\Delta x$	$\Delta T_l/\Delta x$	$\Delta T_{Kopar-2}/\Delta x$

D.3 (0.7 pt)

Jafna:

$\kappa_l =$

$\kappa_{Ltn} =$

Gildi:

$\kappa_l =$

$\kappa_{Ltn} =$

Hluti E: Lögmál Wiedemanns og Franz (0,5 stig)

E.1 (0.5 pt)

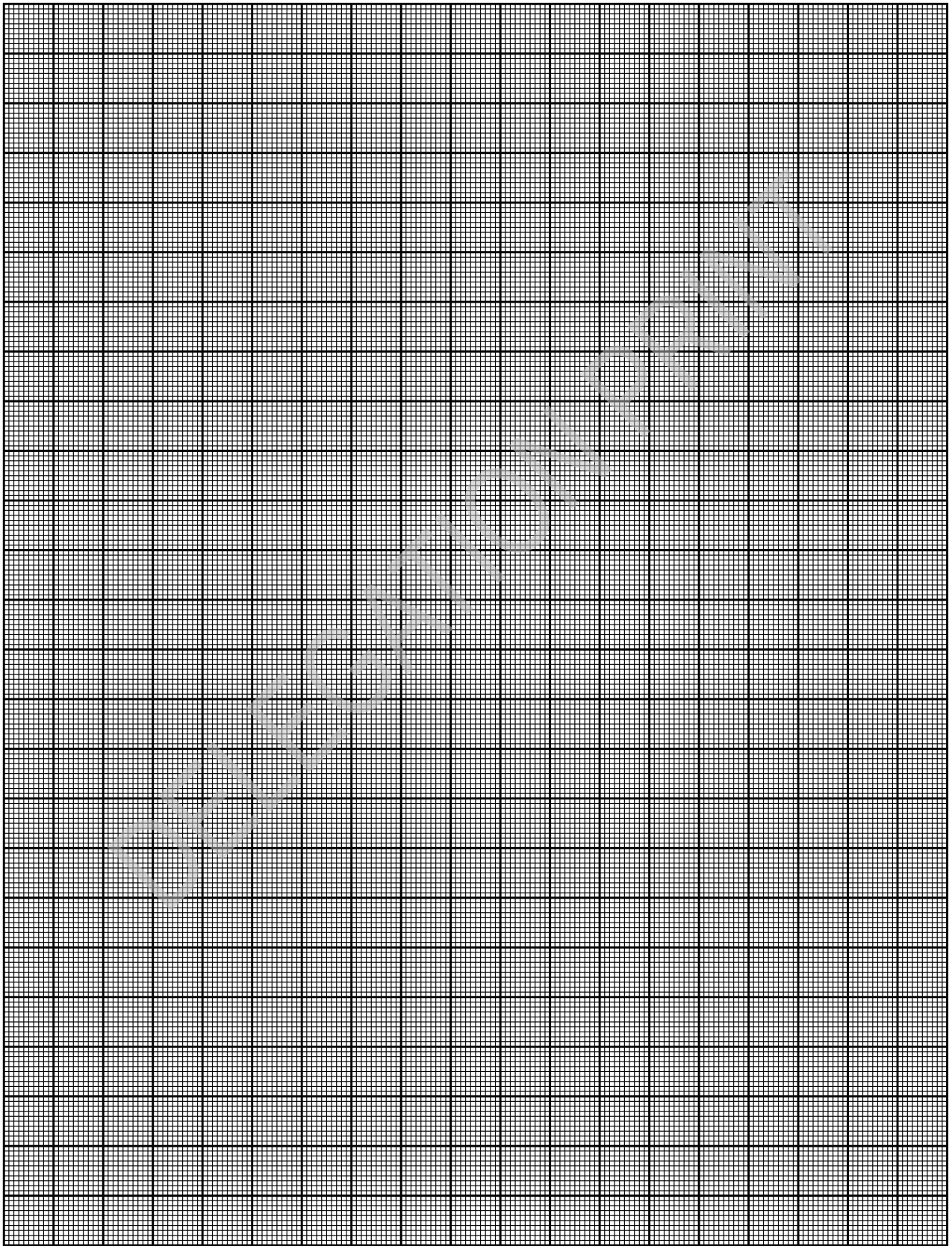
	Kopar	Ál	Látún
Rafleiðni			
Varmaleiðni			
Lorenz fastinn			

Experiment

IPhO ISRAEL 2019 50

A2-7

Icelandic (Iceland)

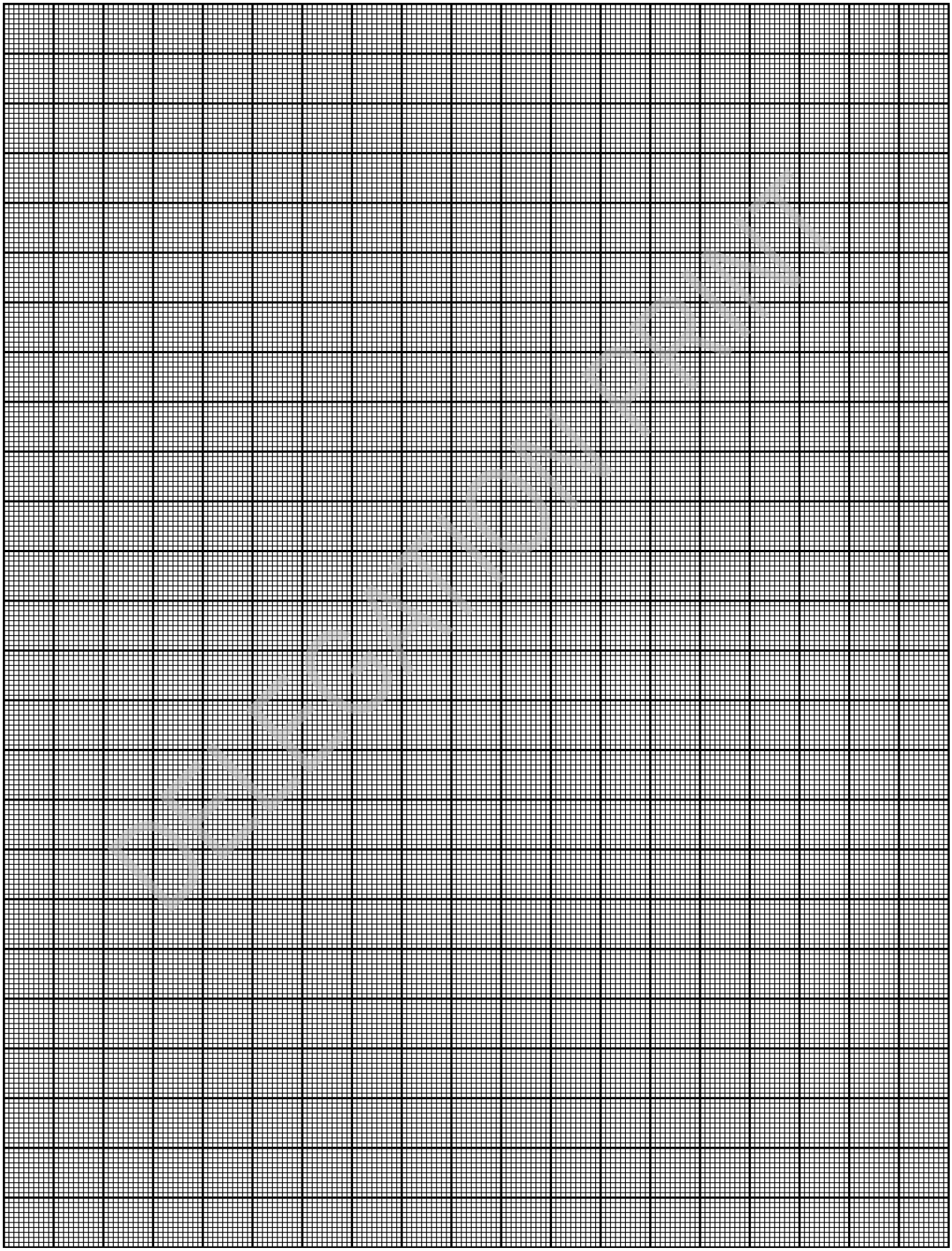


Experiment

ISRAEL 2019

A2-8

Icelandic (Iceland)

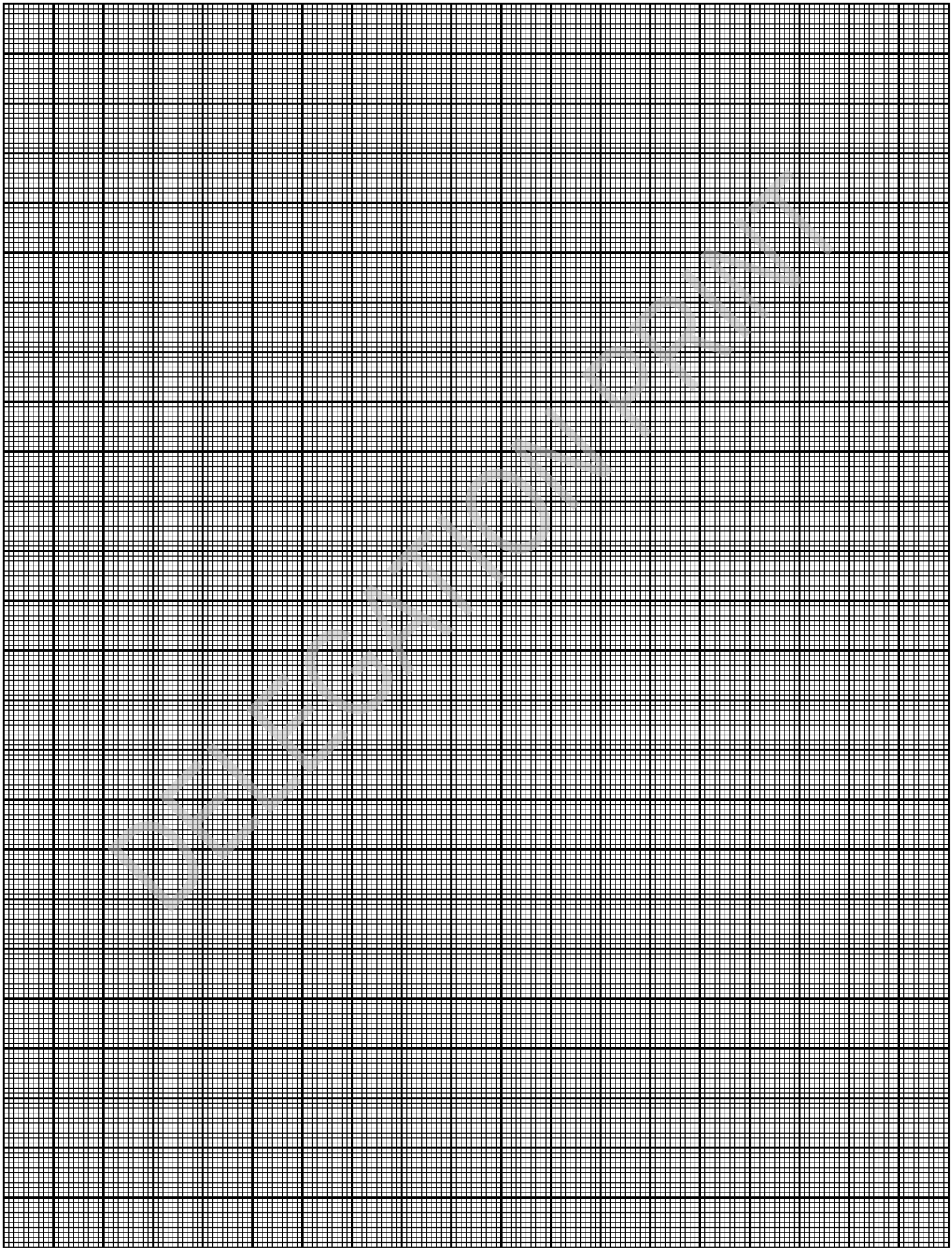


Experiment

ISRAEL 2019

A2-9

Icelandic (Iceland)

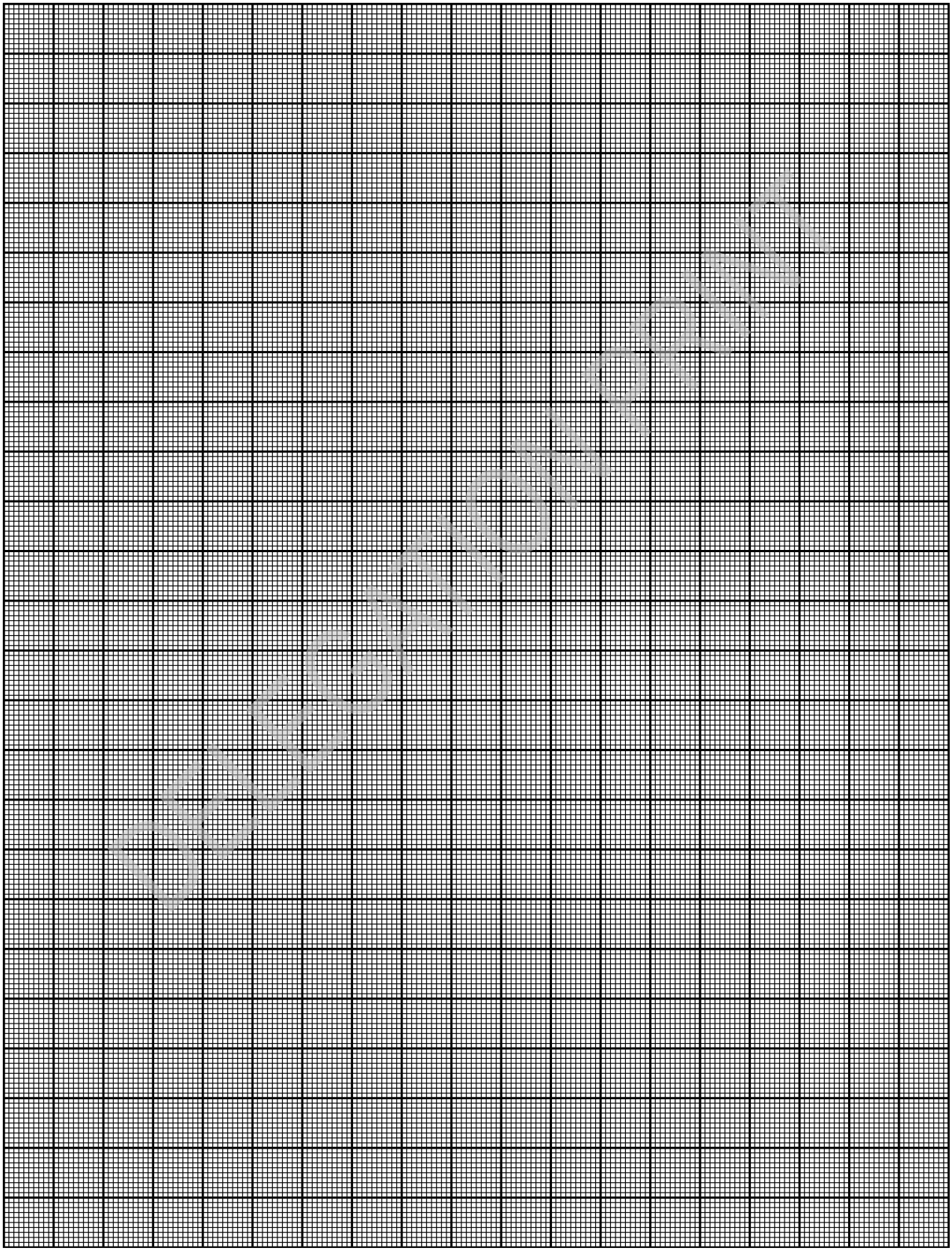


Experiment

IPh ISRAEL 2019 50

A2-10

Icelandic (Iceland)



Experiment

ISRAEL 2019 50

A2-11

Icelandic (Iceland)