KS3 Practical Mark Scheme

29 30

Section I

Hypothesis

H1 State a reasonable hypothesis (prediction).

H2 Explain hypothesis (prediction) using accurate science.

Diagram

D1 State some equipment.

D2 State all of the equipment needed.

D3 Draw a scientific diagram in pencil, with a ruler.

Variables

V1 Stated your independent variable. V2 Stated your dependent variable.

V3 Stated 2 or more controlled variables. V4 Explained how you have controlled these two variables.

Method

M1 Written a step by step method with most of the steps.

M2 Described in detail all of the steps, including how to record measurements.

M3 If I follow your method I will get accurate results.

M4 There is no spelling errors, or punctuation missing from your method.

M5 Your method explains why you will need to repeat the experiment.

Risk Assessment

R1 You have stated two risks and how to prevent them.

R2 You have stated what you will do if someone is hurt with these two risks (remedial actions).

Table

T1 Your results table has your variables as headings.

T2 Your results table includes appropriate units for all of your headings.

Practical Skill

P1 You have demonstrated that you can measure accurately. This means you are measuring to the nearest 0.1g in solids or the nearest 0.5ml in liquids.

Section 2

Graph

G1 Your graph has a sensible x (across) axis, labelled with units.

G2 Your graph has a sensible v axis (up) with units.

G3 Your graph has it's points plotted in the right places in pencil.

G4 Your graph has a line of best fit, or a sentence saying there is no correlation if there is none.

Analysis

A1 You have stated wether your results supports your prediction of not.

A2 You have used two points of data (numbers) to describe how your results supports your prediction or

A3 You have referred to overall trend in your graph, and wether this supports or not your prediction.

Context

C1You have stated a real life context where the results
C2 You have explained how the trend in your of this experiment apply.

results would apply to this real life context.

Evaluation

E1 You have stated one source of error in your method/results. This cannot be human error.

E2 You have described how you could reduce this error if you repeated the experiment.

Section 1 Total	/10	Section 2 Total	/12	Practical total	/20
	/18		/12		/30

KS3 Practical Mark Scheme

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
3	c	3	b	3	a	4	c	4	b	4	a	5	ic	5	b	5	a	6	ic	6	b	6	a	7	С	7	b	7	a

Section I

Hypothesis

H1 State a reasonable hypothesis (prediction).

I think that when we increase the...... thewill.....

H2 Explain hypothesis (prediction) using accurate science.

This is because......

Diagram

D1 State some equipment.

D2 State all of the equipment needed.

D3 Draw a scientific diagram in pencil,

Variables

V1 Stated vour independent variable.

My independent variable I changed was the

V2 Stated your dependent variable.

My dependent variable I measured was.....

V3 Stated 2 or more controlled variables.

To make it a fair test my controlled variables were.....

V4 Explained how you have controlled these two variables.

We made sure it was fair by.....

Method

M1 Written a step by step method with most of the steps.

First you must....

M2 Described in detail all of the steps, including how to record measurements.

We changed by.....

M3 If I follow your method I will get accurate results.

To measure accurately

vou must....

M4 There is no spelling errors, or punctuation missing from your method.

M5 Your method explains why you will need to repeat the experiment.

You will need to repeat the experiment because.....

Risk Assessment

R1 You have stated two risks and how to prevent them.

R2 You have stated what you will do if someone is hurt with these two risks (remedial actions).

The risks are.....

To prevent these risks you must.....

If someone if hurt you must.....

Table

T1 Your results table has your variables as headings.

T2 Your results table includes appropriate units for all of your headings.

cm/N/m/kg/kj etc

Section 2

Practical Skill

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This means you are measuring to the nearest 0.1g in solids or the nearest 0.5ml in liquids.

Your teacher will decide wether or not you have achieved this, you do not need to write anything down.

Graph

G1 Your graph has a sensible x (across) axis, labelled with units.

G2 Your graph has a sensible y axis (up) with units.

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A1 You have stated wether your results supports your prediction of not.

My results supports/do not support my prediction that..... A2 You have used two points of data (numbers) to describe how your results supports your prediction or not.

I can see this because at..... my result was..... whilst/and atmy result

A3 You have referred to overall trend in your graph, and wether this supports or not your prediction.

My graph shows that as increases/decreases(also) increases/decreases. This supports/does not support my prediction.

Context

C1You have stated a real life context where the results
C2 You have explained how the trend in your of this experiment apply.

This experiment applies to the real world because......

results would apply to this real life context.

From my results I can see that..... this means

Evaluation

E1 You have stated one source of error in your method/results. This cannot be human error.

/18

A source of error that could have affected my results/measurement was...

E2 You have described how you could reduce this error if you repeated the experiment.

If I were to repeat the experiment I could reduce the error by......

Section	1
Total	

Section 2 Total

/12

Practical total

/30

KS3 Practical Mark	Scheme 1 2 3 4	5 6 7 G+	7 8 9 F-	10 11 F+	12 13 1 E-	4 15 16 E	17 18 E+				
Sect	ion I			Secti	on 2						
<u>Hypothesis</u>		Practical Skill									
H1 State a reasonable hypothesis (prediction).	H2 Explain hypothesis (prediction) using accurate science.	P1 You have d	demonstrated t	hat you can us	e equipment s	afely.					
I think that when we increase the thewill	This is because	<u>Graph</u>									
Diagram D1 State some equipment. D2 State all of needed.	the equipment D3 Draw a scientific diagram in pencil, with a ruler.	G1 Your graph sensible x (acc labelled with	ross) axis,	G2 Your grap sensible y as units.		G3 Your graph points plotted places in pend	l in the right				
<u>Variables</u>		<u>Analys</u>	<u>is</u>								
V1 Stated your independent variable.	V2 Stated your dependent variable.	A1 You have s	stated wether	your results su	pports your pr	ediction of not.					
My independent variable I changed was the	My dependent variable I measured was	My results	supports/do	not support	my predicti	on that					
<u>Method</u>		<i>'</i>			, ,						
M1 Written a step by step method with most of	M2 Described in detail all of the steps, including how	<u>Contex</u>	<u>xt</u>								
the steps.	to record measurements.	C1You have st	tated a real life	e context where	e the results of	this experimen	t apply.				
First you must	We changed by	This experi	ment applies	to the real	world becaus	se					
Risk Assessment											
R1 You have stated two risks and how to prev	ent them.										
The risks are											
<u>Table</u>					ı						
T1 Your results table has your variables as headings.	T2 Your results table includes appropriate units for all of your headings.	Section 1 Total	/12	Section 2 Total	Ic	Practical total	/10				
	cm/N/m/kg/kj etc		/12		/6		/18				

KS3 Practical Mark	Scheme 1 2	3 4 3b	5 6 3a	7 8 4c	9 10 4b	11 4a		3 14 5c	15 16 5b	17 18 5 a		
Sect	ion I	'			S	ecti	on 2	2				
<u>Hypothesis</u>			Practical Skill									
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<u>Method</u>			′									
BA4 NAVitable of a story by story protein and with process of	A42 Described to detail all afabracture	to aloration a la acco	Cont	<u>ext</u>								
M1 Written a step by step method with most of the steps.	M2 Described in detail all of the steps, to record measurements.	including now	C1You hav	e stated a re	eal life cont	ext wher	e the res	ults of tl	his experimer	ıt apply.		
First you must	We changed by		This exp	eriment ap	plies to 1	he real	world b	ecause	<u></u>			
Risk Assessment												
R1 You have stated two risks and how to prev	ent them.											
The risks are To prevent these risks you must												
Table			<u> </u>	1	1		1	1	1			
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	cm/N/m/kg/kj etc			/	/12			/6		/18		

KS3 Practical Mark Scheme 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 20 21 22 23 24 25 26 27 28 29 30 G-D+

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Section	1
Total	

Section 2 Total

Practical total

/12

	Sect	ion I		<u> </u>			Sect	on 2		
<u>Sources</u>					Prac	tical Sk	<u>ill</u>			
1 Two relevant sources are ider rebsites full URL needed).	ntified. (If S2 The usefulness of commented on.	nf one source is	A comparison be fulness of the to			monstrated that y		-	earest 0.5ml in li	iquids.
<u> Hypothesis</u>		mac			Your teacher w down.	ill decide wether	or not you have a	chieved this, you	do not need to v	write anything
I1 State a reasonable hypoti	hesis (prediction)	U2 Evalain hypothesis (are	ediction) using as	scurata ccianca	<u>Graph</u>	1				
	nesis (prediction).	H2 Explain hypothesis (pre	ediction) using ac	ccurate science.	G1 Your graph l		ır graph has a	G3 Your graph h points plotted in		ır graph has a le line of best fit, or
<u>Variables</u>			V4 Explai	ained how you have	sensible x (acro labelled with u		le y axis (up) nits.	right places to v 1mm in pencil.	uithin a sente	ence saying there is relation if there is
V1 Stated your independent variable.	V2 Stated your dependent variable.	V3 Stated 2 or more controlled variables.	•	ed these two	Analy	<u>sis</u>				
V5 Explained how not controlling these variables could affect your	V6 Identified one of your variables that is difficult to	V7 Explained why this variable is difficult to		gest how this e could be measured	-	ated wether your	A2 You have used	two points of	A3 You have r	eferred to overall
nvestigation/results.	measure accurately.	measure accurately.		ccurately.		s your prediction	data (numbers) t your results supp prediction or not	orts your	this supports	graph, and wethe or not your
<u>Diagram</u>					Evalua	ation			prediction.	
D1 State some equipment.	D2 State all of the		•	scientific diagram abelled in ruler and	E1 You have c	orrectly	F2 Van bana id		E3 You have s	stated one
<u>1ethod</u>		per	ncil.		identified any results or stat have no anom	ed that you	E2 You have id wether you ne repeat any res	eded to	source of range your method, cannot be hu	/results. This
M1 Written a step by step nethod with most of the	M2 Described in detail all of the steps, including how to record	M3 If I follow your method will get accurate results.	d I reference	Method includes a e to the precision at easurements must be	E4 You have st	tated one ematic error in	E5 You have st	ated how	E6 You have o	described how
teps.	measurements.	will get accurate results.	made.	easurements must be	your method/ cannot be hur	results. This	these errors ca actual results	•	errors if you rexperiment.	
M5 Your method explains why you will need to repeat the experiment.	M6 You have clearly identified controls stated how they are monitored.	M7 There is no spelling err or punctuation missing fro your method.			<u>Looki</u>	ng at aı	nother	Group	's Resu	ı <u>lts</u>
<u>Risk Assessn</u>	<u>nent</u>				L1 You have co	mnared your			L3 You have sta	ated why we
1 You have identified any si	gnificant hazards.	R2You have stated appr hazards.	opriate control	I measures for the	results (overall	trend/pattern)	L2 You have include (numbers) in your		•	esults with other ucibility ,pattern,
<u> Table</u>					Conte	ext			ciecky	
L Your results table has your va	riables as headings.	T2 Your results table include headings.	es appropriate u	units for all of your	C1You have stat	ed a real life	C2 You have ex	plained how	C3 You can sta	ated how your
_					context where t	the results of this	the trend in yo		results can be context.	used in the
<u>ntervals</u>										
You have stated the interval upour independent variable. Inclu				wether or not the with a detailed		 	 	 		
nits.	explanation.	•	lanation.	a actunea	Section 1		Section 2		Practical	
					Total	/30	Total	/20	total	/50