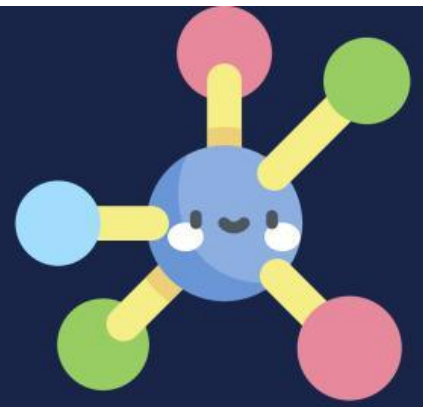
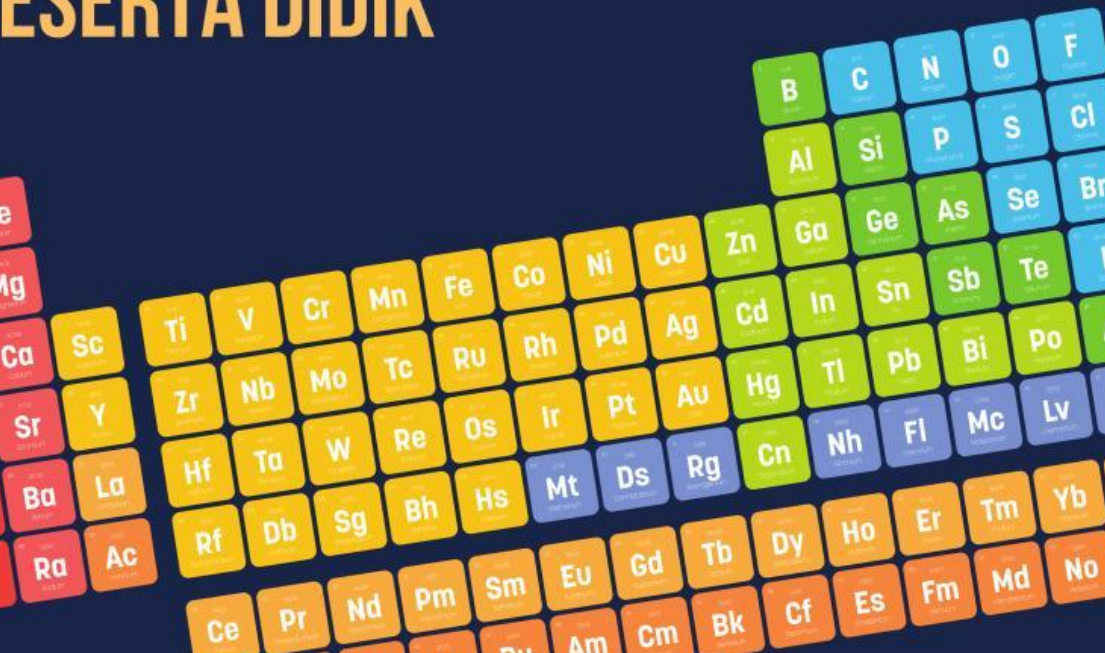




PESERTA DIDIK



A periodic table of elements is displayed on a dark blue background. The elements are color-coded by groups: alkali metals (red), alkaline earth metals (orange-red), transition metals (yellow), post-transition metals (light green), metalloids (green), nonmetals (light blue), halogens (blue), noble gases (dark blue), lanthanides (orange), and actinides (dark orange). The table is tilted slightly to the right.



GOLONGAN DAN PERIODE

Kelas :

Petunjuk Penggunaan LKPD

1. Simaklah dengan seksama tujuan pembelajaran yang tertera pada LKPD ini
2. Jawablah setiap soal yang terdapat di dalam LKPD ini dengan tepat
3. Apabila terdapat hal yang tidak dimengerti bertanyalah pada guru



Tujuan Pembelajaran

1. Menentukan periode dan golongan unsur
2. Menganalisis hubungan antara konfigurasi elektron dengan letak unsur dalam tabel periodik



Stimulus

Perhatikan gambar di bawah ini!



Pernahkah kalian berbelanja di Mr.DIY? Bagaimana penyusunan barang-barang di tempat tersebut?

PERIODIC TABLE OF THE ELEMENTS

<http://www.kj-rosen.org/periodic/>

GROUP	1	2	RELATIVE ABUNDANCE (AVERAGE)										11	12	GROUP 13-18										19	20				
PERIOD	1	2											3	4											5	6				
1	H 1.00794												Li 6.941	Be 9.012182											B 10.811	C 12.0107	N 14.00643	O 15.999	F 18.9984032	Ne 20.1797
2	Li 6.941	Be 9.012182											B 10.811	C 12.0107	N 14.00643	O 15.999	F 18.9984032	Ne 20.1797												
3	Na 22.98976928	Mg 24.304											Al 26.9815386	Si 28.08558	P 30.973762	S 32.06	Cl 35.453	Ar 39.948												
4	K 39.0983	Ca 40.078	Sc 44.955912	Ti 47.867	V 50.9415	Cr 51.9961	Mn 54.938045	Fe 55.845	Co 58.933195	Ni 58.6934	Cu 63.546	Zn 65.38	Ga 69.723	Ge 72.64	As 74.9216	Se 78.96	Br 79.904	Kr 83.798												
5	Rb 85.4678	Sr 87.62	Y 88.90584	Zr 91.224	Nb 92.90638	Mo 95.94	Tc 98	Ru 101.07	Rh 101.07	Pd 106.3276	Ag 107.8642	Cd 112.411	In 114.818	Sn 118.710	Sb 121.757	Te 127.6	I 126.905	Xe 131.29												
6	Cs 132.90545	Ba 137.327	La-Lu 57-71		Hf 178.49	Ta 180.94788	W 183.84	Re 186.207	Os 190.23	Ir 192.222	Pt 195.084	Au 196.966569	Hg 200.59	Tl 204.38	Pb 207.2	Bi 208.9804	Po 209	At 210	Rn 222											
7	Fr 223	Ra 226	Ac-Lr 89-103		Rf 261	Db 262	Sg 266	Bh 264	Hs 277	Mt 268	Uun 271	Uun 272	Uun 273	Uun 274	Uun 275	Uun 276	Uun 277	Uun 278	Uun 279											

(*) Periodic Table, 72, 94, 8, 887, 888 (2001)

Relative atomic mass is shown with the appropriate number of significant figures. The values shown in brackets are the atomic weights of the elements as determined by mass spectrometry.

AC: Actinides
L: Lanthanides
T: Transition metals
P: Post-transition metals
M: Main group elements
G: Group elements
H: Halogens
N: Noble gases
A: Alkali metals
B: Alkaline earth metals
C: Carbon group
S: Sulfur group
H: Halogens
N: Noble gases

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2659, 2661, 2663, 2665, 2667, 2669, 2671, 2673, 2675, 2677, 2679, 2681, 2683, 2685, 2687, 2689, 2691, 2693, 2695, 2697, 2699, 2701, 2703, 2705, 2707, 2709, 2711, 2713, 2715, 2717, 2719, 2721, 2723, 2725, 2727, 2729, 2731, 2733, 2735, 2737, 2739, 2741, 2743, 2745, 2747, 2749, 2751, 2753, 2755, 2757, 2759, 2761, 2763, 2765, 2767, 2769, 2771, 2773, 2775, 2777, 2779, 2781, 2783, 2785, 2787, 2789, 2791, 2793, 2795, 2797, 2799, 2801, 2803, 2805, 2807, 2809, 2811, 2813, 2815, 2817, 2819, 2821, 2823, 2825, 2827, 2829, 2831, 2833, 2835, 2837, 2839, 2841, 2843, 2845, 2847, 2849, 2851, 2853, 2855, 2857, 2859, 2861, 2863, 2865, 2867, 2869, 2871, 2873, 2875, 2877, 2879, 2881, 2883, 2885, 2887, 2889, 2891, 2893, 2895, 2897, 2899, 2901, 2903, 2905, 2907, 2909, 2911, 2913, 2915, 2917, 2919, 2921, 2923, 2925, 2927, 2929, 2931, 2933, 2935, 2937, 2939, 2941, 2943, 2945, 2947, 2949, 2951, 2953, 2955, 2957, 2959, 2961, 2963, 2965, 2967, 2969, 2971, 2973, 2975, 2977, 2979, 2981, 2983, 2985, 2987, 2989, 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3655, 3657, 3659, 3661, 3663, 3665, 3667, 3669, 3671, 3673, 3675, 3677, 3679, 3681, 3683, 3685, 3687, 3689, 3691, 3693, 3695, 3697, 3699, 3701, 3703, 3705, 3707, 3709, 3711, 3713, 3715, 3717, 3719, 3721, 3723, 3725, 3727, 3729, 3731, 3733, 3735, 3737, 3739, 3741, 3743, 3745, 3747, 3749, 3751, 3753, 3755, 3757, 3759, 3761, 3763, 3765, 3767, 3769, 3771, 3773, 3775, 3777, 3779, 3781, 3783, 3785, 3787, 3789, 3791, 3793, 3795, 3797, 3799, 3801, 3803, 3805, 3807, 3809, 3811, 3813, 3815, 3817, 3819, 3821, 3823, 3825, 3827, 3829, 3831, 3833, 3835, 3837, 3839, 3841, 3843, 3845, 3847, 3849, 3851, 3853, 3855, 3857, 3859, 3861, 3863, 3865, 3867, 3869, 3871, 3873, 3875, 3877, 3879, 3881, 3883, 3885, 3887, 3889, 3891, 3893, 3895, 3897, 3899, 3901, 3903, 3905, 3907, 3909, 3911, 3913, 3915, 3917, 3919, 3921, 3923, 3925, 3927, 3929, 3931, 3933, 3935, 3937, 3939, 3941, 3943, 3945, 3947, 3949, 3951, 3953, 3955, 3957, 3959, 3961, 3963, 3965, 3967, 3969, 3971, 3973, 3975, 3977, 3979, 3981, 3983, 3985, 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4651, 4653, 4655, 4657, 4659, 4661, 4663, 4665, 4667, 4669, 4671, 4673, 4675, 4677, 4679, 4681, 4683, 4685, 4687, 4689, 4691, 4693, 4695, 4697, 4699, 4701, 4703, 4705, 4707, 4709, 4711, 4713, 4715, 4717, 4719, 4721, 4723, 4725, 4727, 4729, 4731, 4733, 4735, 4737, 4739, 4741, 4743, 4745, 4747, 4749, 4751, 4753, 4755, 4757, 4759, 4761, 4763, 4765, 4767, 4769, 4771, 4773, 4775, 4777, 4779, 4781, 4783, 4785, 4787, 4789, 4791, 4793, 4795, 4797, 4799, 4801, 4803, 4805, 4807, 4809, 4811, 4813, 4815, 4817, 4819, 4821, 4823, 4825, 4827, 4829, 4831, 4833, 4835, 4837, 4839, 4841, 4843, 4845, 4847, 4849, 4851, 4853, 4855, 4857, 4859, 4861, 4863, 4865, 4867, 4869, 4871, 4873, 4875, 4877, 4879, 4881, 4883, 4885, 4887, 4889, 4891, 4893, 4895, 4897, 4899, 4901, 4903, 4905, 4907, 4909, 4911, 4913, 4915, 4917, 4919, 4921, 4923, 4925, 4927, 4929, 4931, 4933, 4935, 4937, 4939, 4941, 4943, 4945, 4947, 4949, 4951, 4953, 4955, 4957, 4959, 4961, 4963, 4965, 4967, 4969, 4971, 4973, 4975, 4977, 4979, 4981, 4983, 4985, 4987, 4989, 4991, 4993, 4995, 4997, 4999, 5001, 5003, 5005, 5007, 5009, 5011, 5013, 5015, 5017, 5019, 5021, 5023, 5025, 5027, 5029, 5031, 5033, 5035, 5037, 5039, 5041, 5043, 5045, 5047, 5049, 5051, 5053, 5055, 5057, 5059, 5061, 5063, 5065, 5067, 5069, 5071, 5073, 5075, 5077, 5079, 5081, 5083, 5085, 5087, 5089, 5091, 5093, 5095, 5097, 5099, 5101, 5103, 5105, 5107, 5109, 5111, 5113, 5115, 5117, 5119, 5121, 5123, 5125, 5127, 5129, 5131, 5133, 5135, 5137, 5139, 5141, 5143, 5145, 5147, 5149, 5151, 5153, 5155, 5157, 5159, 5161, 5163, 5165, 5167, 5169, 5171, 5173, 5175, 5177, 5179, 5181, 5183, 5185, 5187, 5189, 5191, 5193, 5195, 5197, 5199, 5201, 5203, 5205, 5207, 5209, 5211, 5213, 5215, 5217, 5219, 5221, 5223, 5225, 5227, 5229, 5231, 5233, 5235, 5237, 5239, 5241, 5243, 5245, 5247, 5249, 5251, 5253, 5255, 5257, 5259, 5261, 5263, 5265, 5267, 5269, 5271, 5273, 5275, 5277, 5279, 5281, 5283, 5285, 5287, 5289, 5291, 5293, 5295, 5297, 5299, 5301, 5303, 5305, 5307, 5309, 5311, 5313, 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Apa dasar penyusunan unsur di dalam tabel periodik di atas?

Identifikasi Masalah

1. Bagaimana pengelompokkan unsur-unsur dalam tabel periodik unsur?
2. Apa kaitan konfigurasi elektron dengan golongan?
3. Apa kaitan konfigurasi elektron dengan periode?

Pengumpulan Data

Perhatikan video berikut di bawah ini!



Pengumpulan Data

Lalu lengkapi pertanyaan berikut silahkan mencari referensi dan konfigurasi elektron dan kaitannya terhadap periode dan golongan

1.Cara menentukan periode berdasarkan konfigurasi elektron

2.Cara menentukan golongan berdasarkan konfigurasi elektron

Mengolah Data

①



Berdasarkan konfigurasi elektron tersebut letak unsur Cu dalam tabel periodik unsur berada pada golongan dan

②

Diketahui suatu unsur X terletak pada golongan III A dan periode 3. Tuliskan konfigurasi elektron unsur X tersebut

③

Unsur X mempunyai nomor atom 19 unsur X terletak pada golongan dan periode

④

Unsur ${}_{35}\text{Br}$ terletak pada golongan dan periode

⑤

Unsur ${}_{24}\text{Cr}$ terletak pada golongan dan periode

Pembuktian

Sampaikan hasil kerja di depan dan ditanggapi oleh teman lain

Penarikan Kesimpulan