

I. Mannopowa, R. Mawlonowa,
N. Ibragimowa

TEHNOLOGIYA

Umumy orta bilim berýän mekdepleriň
1-nji synpy üçin derslik

Gaýtadan işlenen we doldurylan
bäşinji neşir

*Özbekistan Respublikasynyň Halk bilimi ministrligi
tarapyndan tassyklanan*

„O‘QITUVCHI“ NEŞIRYAT-ÇAPHANA DÖREDIJILIK ÖYI

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Syn ýazanlar:

- Z. Şamsiyewa** – Respublikan tälim merkeziniň bölüm başlygy;
M. Polatowa – Daşkent şäherindäki 144-nji orta mekdebiň tehnologiýa mugallymy;
D. Karimowa – Buhara şäherindäki 18-nji orta mekdebiň tehnologiýa mugallymy.

ŞERTLI BELGILER:



– mugallym okap berýär;



– topar bolup işleýäris;



– amaly iş;



– pikirlenip jogap berýäris;



– ata-eneleriň kömeginde taýýarlaýarys;



– döredijilikli iş.

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1-nji ders. TEHNOLOGIÝA ÝLMY BARADA DÜŞÜNJE



Surata ünsli serediň!



Şäheriň köçelerinden biri suratlandyrylypdyr. Suratda nämeleri görýärsiňiz ?

Ondan tebigy we adam tarapyndan döredilen zatlary tapyň we aýdyň.

ADAM DÖREDEN DÜNYÄ



📖 Bu otagdaky zatlar bize gerekmi? Olary kim taýýarlapdyr? Nähili önümlerden taýýarlanypdyr?



Suratlarda görkezilen zatlar nähili önümlerden taýýarlanypdyr? Adam bu zatlary taýýarlamak üçin önümleri nireden alypdyr?

📖 Suratlary synlaň. Olarda suratlandyrylan käriň eýeleri nähili işi amala aşyrýarlar? Olaryň kärini aýdyň.



Her bir käriň eýesine gerek bolýan esbaplary saýlaň.

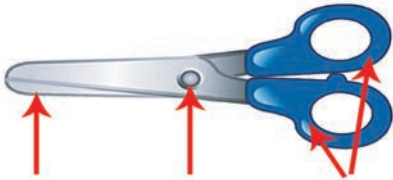


📖 Tehnologiýa predmeti materialy dogry işläp taýýarlamagyň usullaryny öwredýär.



HOWPSUZLYK TEHNIKASY KADALARY

Gaýçy bilen işlemegiň kadasy
Gaýçy nähili gurlan?



Tygy Hyrly myh Halka



Näme üçin gaýçyny suratda görkezilişi ýaly edip uzatmaly?



Siz nähili pikir edýärsiňiz, näme üçin gaýçy gaba salnyp goýulýar?

Gaýçy bilen uzyn kagyздan üçburçluk we kwadrat şekilleri gyrkyň.



Iş stoly





Ýelim bilen işlemegiň kadasy



Ýelimi ortadan gyra tarap çalyň.



Artykmaç ýelimi süpürip alyň. Üstüne zat goýup guradyň.



Çotgany ulanyp bolansoň, ýuwup goýuň. Ýelim salynýan gaby ýapyk ýagdaýda saklaň.



2-nji ders. „ALTYN GÜÝZ“ GÖRNÜŞINI ÝASAMAK

Tebigat reňbe-reň we owadan. Adam döretmegi hemişe tebigatdan öwrenipdir.



Hany, serediň, tebigy materiallardan tebigatyň gőzelligini nähili döretmek mümkin? Onda nähili tebigy materiallardan peýdalanylypdyr?



Pikirleniň. Näme üçin tebigaty goramak gerek?



ÝAPRAK BILEN IŞLEMEK

Ýapraklary nähili guratmaly?

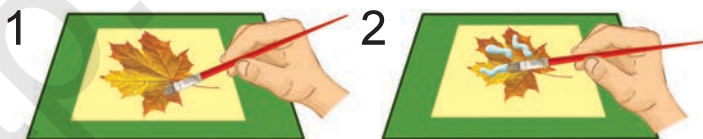
Dökülen ýapraklary ýygyp alyň.



Üstüne zat goýup guradyň.



Ýaprak bilen suratda görkezilen yzygiderlikde işläň.





„ALTYN GÜYZÜŇ“ GÖRNÜŞINI ÝAPRAKLARDAN EMELE GETIRMEK



Özbaşdak ýagdaýda ýapraklardan
„altyn güyzüň“ görnüşini ýasaň.





3-nji ders. ÝAPRAKLARDAN NAGYŞ KOMPOZISIÝASYNY DÖRETMEK

Suratda ýapraklardan düzülen nagyş kompozisiýasy berlen. Deňeşdiriň. Haýsysy size ýakdy? Näme üçin?

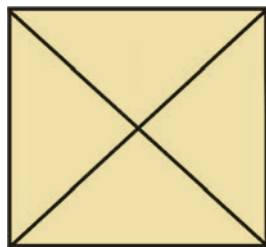


Kompozisiýa – şekillendirmäni bir-birine görä mälim tertipde ýerleşdirmekdir.

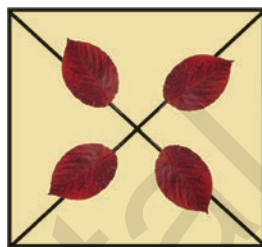




Nagyş düzmek üçin ýapraklary se-
çip alyň we nähili ýerleşdirmegi oýlap
görüň.



1



2



3



4



1



2



3

Ýatda saklaň! Ýapragy gaýçy bilen
gyrkmaň, onuň gerekli şekildäkisini
saýlaň. Ýapyşdyranda ýelimi ýapragyň
damarlaryna çalyň. Işi gutaranyňyzdan
soň üstüne zat goýup guradyň.



4-nji ders. ÝAPRAKLARDAN ÖÝ GUŞUNYŇ ŞEKILINI ÝASAMAK



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Özüňiz ýasajak boluň.





TEBIGY MATERIALLARDAN GUŞJAGAZYŇ ŞEKILINI ÝASAMAK



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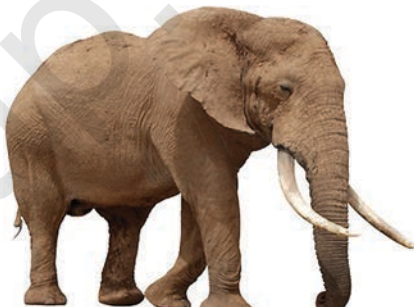
5-nji ders. ÝAPRAKLARDAN HAÝWANLARYŇ ŞEKILINI ÝASAMAK



Suratda näme şekillendirilen? Ol nähili böleklerden ybarat? Towşan ýasamak üçin size nähili şekildäki ýapraklar gerek bolar? Ýasamagyň zygiderligine üns beriň we özüňiz hem ýasaň.



DEŃEŐDIRIŃ





6-njy ders. ÝAPRAKLARDAN ÖÝ GUŞLARYNY ÝASAMAK



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7-nji ders. TEBIGY WE DÜRLI MATERIALLARDAN GUŞLAR ÝASAMAK



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Özüňiz ýasajak boluň.





8-nji ders. TEBIGY WE DÜRLI MATERIALLARDAN KOMPOZISIÝA DÖRETMEK



Ösümlükler tebigatyň bir bölegidir. Olar suratkeş-ussalaryň döredijilik etmekleri üçin dürli hili materiallary berýär.

Suratkeş-ussalar üçin tebigat nähili materiallary berýär? Aýdyp beriň.



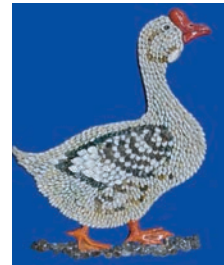
Üns beriň! Şahalary, ýapraklary da-
ragtdan ýolmaň we döwmäň. Diňe ýere
gaçanlaryny alyň. Tebigaty goraň!



9-njy ders. TOHUMLARY ÝYGMAK WE SAKLAMAK



Tomusda we güýzde ösümlükler tohum emele getirýär. Suratda berlen tohumlar haýsy ösümlükleriň tohumydygyny tapyň.



Ýatda saklaň! Tohumlary seýle çykanyňyzda ýygyp geliň, gowuja ýuwuň we guradyň. Soňra gaplarda saklaň.



10-njy ders. TOHUMLARDAN NAGYŞ ÝASAMAK



Reňkli kartondan ini 3 sm, uzynlygy 9 sm bolan gönüburçluk şekili gyrkyp alyp, galam bilen deň bölekler bölüşdiriň. Onuň içine nagyş çekiň, soňra ýelim ýa-da plastilin bilen tohumlary nagyşyň üstüne ýapyşdyryp çykyň.

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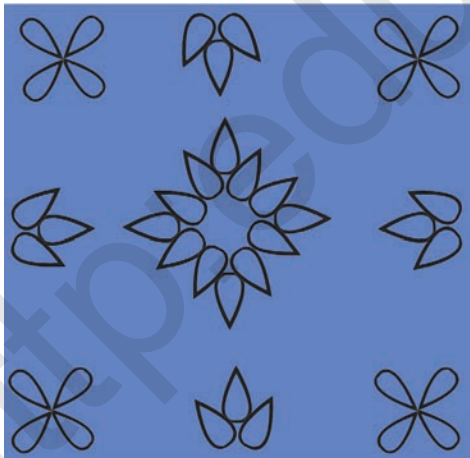
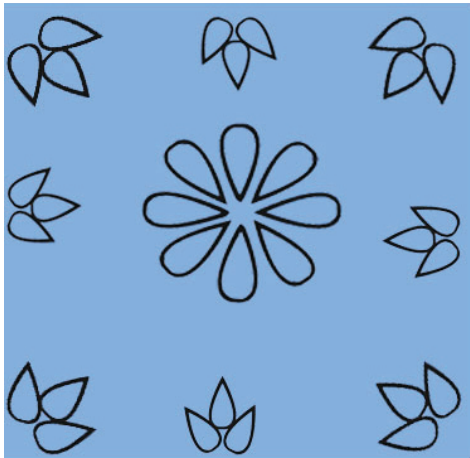


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ÖZÜŇIZ ÝASAJAK BOLUŇ

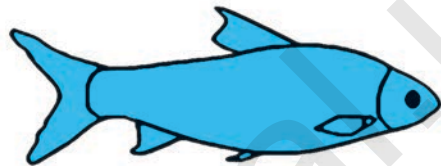




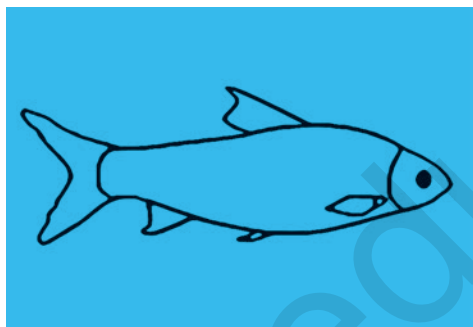
11-nji ders. BALYGYŇ ŐEKI- LINI ÝASAMAK



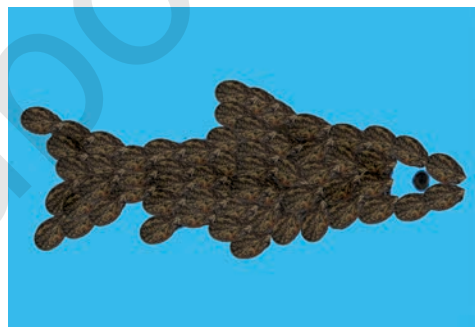
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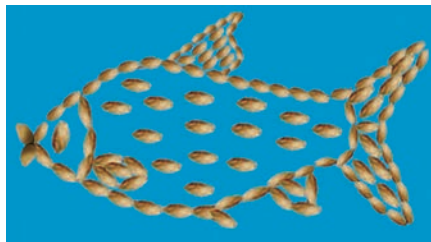


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Özüňiz ýasajak boluň.





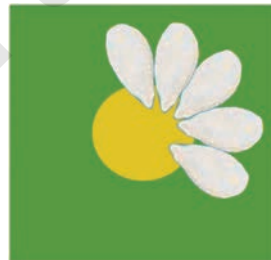
12-nji ders. ÇOPANTELPEK GÜLÜNİ ÝASAMAK



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Özüňiz ýasajak boluň.





ÖZÜŇIZI BARLAŇ



Mugallymyňyzy we ata-eneňizi begendiriň. Nämäni bilýändigizi, ýerine ýetirip bilýändigizi görkeziň. Dogry jogaby saýlaň.

Tebigy materiallar bilen işläniňizde nähili esbaplary ulanýarsyňyz?



Tebigy bolmadyk material näme?



Haýsy suratda nagyş dogry ýasalypdyr?



Synpdaşlaryňyz bilen jogaplary ara alyp maslahatlaşyň.



KAGYZ WE KARTON BILEN IŞLEMEK

Kagyz — bu bize gerek bolýan materialdyr.

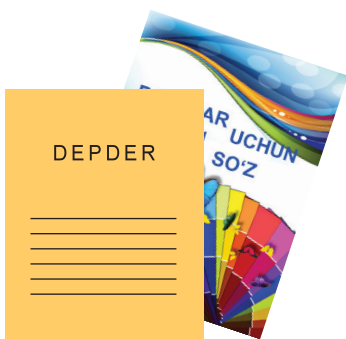


Siz kagyzdan işlenen nähili zatlary bilýärsiňiz? Surata ünsli serediň. Bu zatlar kime we näme üçin gerek?



Kartony reňkli kagyzlaryňyzyň arasyndan tapyň. Nähili meňzeşlik bar? Dürli kagyzlary elläp görüň. Nämäni duýduňyz? Kagzyň aýratynlyklaryny aýdyň.

13-nji ders. KAGYZ WE ONUŇ GÖRNÜŞLERI



Ýazuw kagyzy.



Gazet kagyzy.



Karton.



Surat kagyzy.



Sowgat dolanýan kagyzy.

KAGYZ BILEN İŞLEMEK



Üñi esasynda bellik etmek.



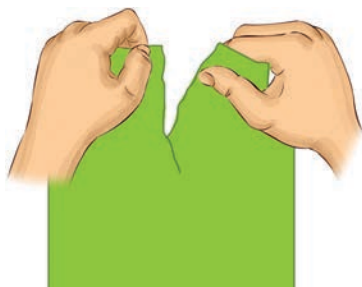
Gyrkmak



Gyrkyp aýyrmak



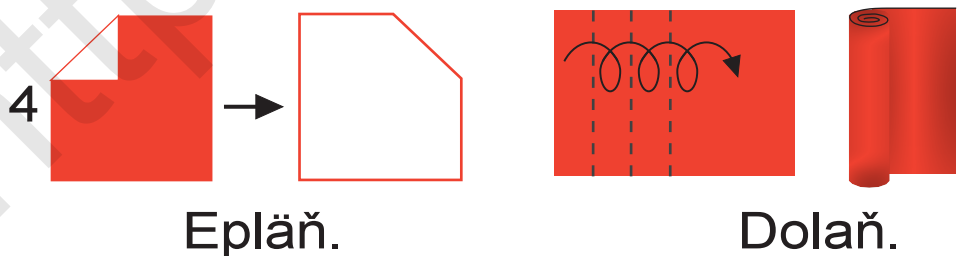
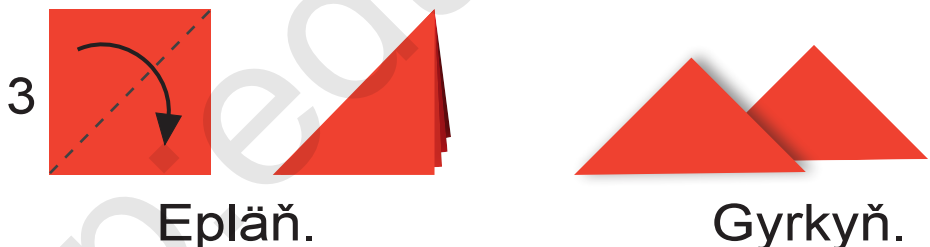
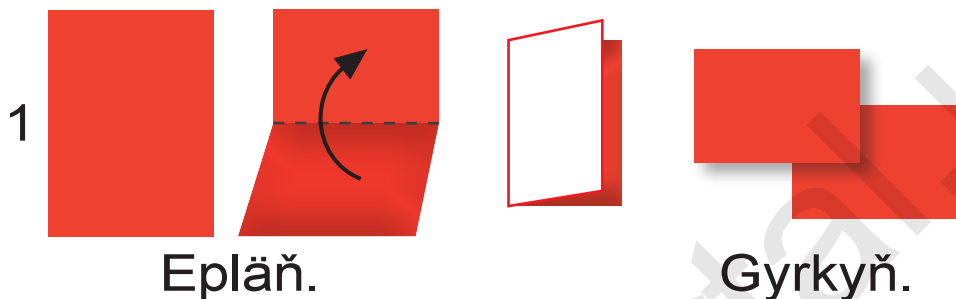
Dolamak



Ýyrtmak

Siziñ pikiriňizçe, kagyz bilen ýene näme etmek mümkin?

KAGYZY EPLEMEGIŇ WE GYRKMAGYŇ USULLARY





KIÇI USSA OÝNY

Gözelligi bilelikde döredýäris.
Siziň üçin aşakdakylar gerek bolýar:



Indi siz kagyz bilen işlemegiň kadalaryny bilýärsiňiz.

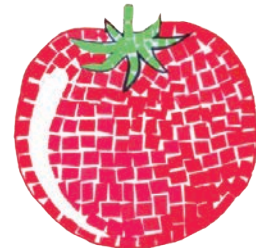
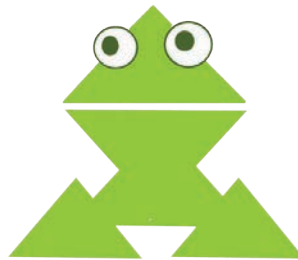
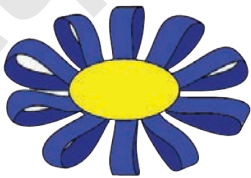
Kagyzdan zatlar ýasanda olardan peýdalanyň.



Kagyz listinden nämeler emele geldi?

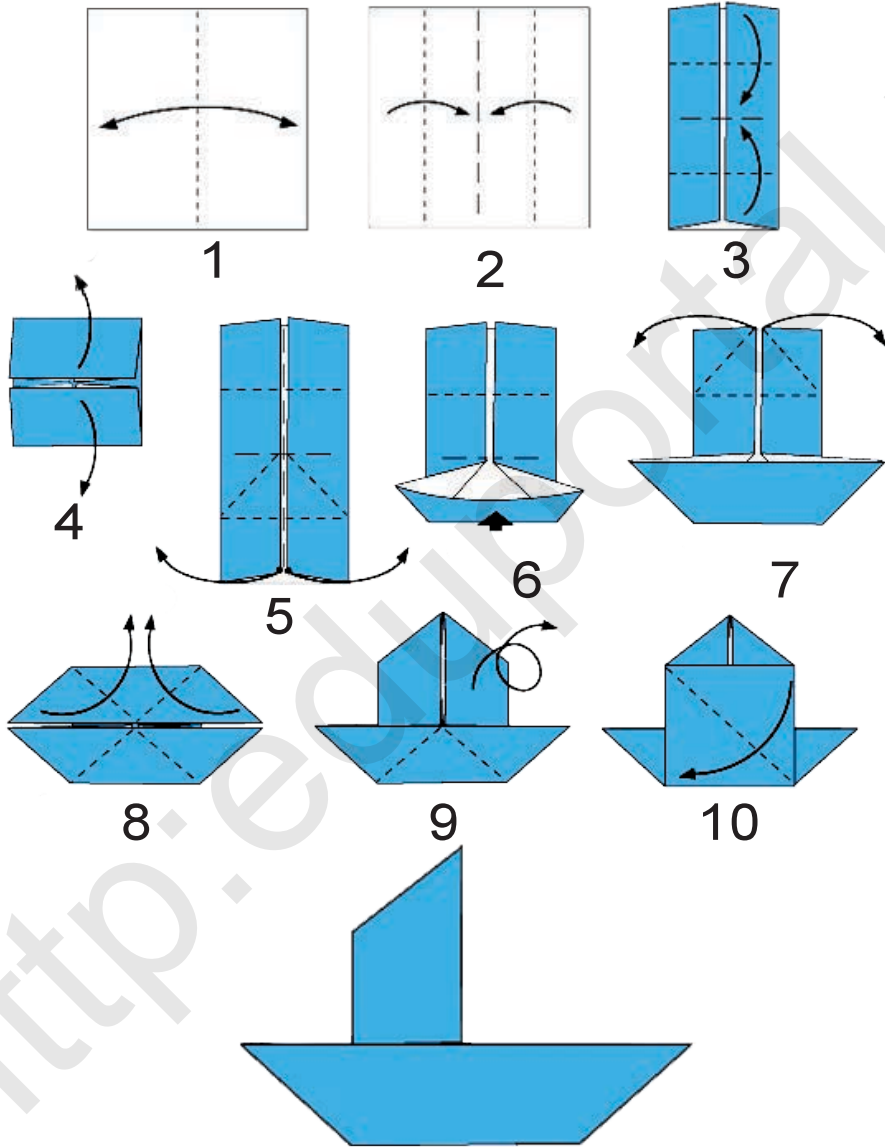
Ugur tapyjylygyňyzy ulanyp, berlen şekillerden haýsy-da bolsa bir görnüş ýasajak boluň.

Aşakdakylar nämä meňzeýär?





GAÝYK ÝASAMAK





14-nji ders. KITAP ÜÇİN BELLİK ÝASAMAK

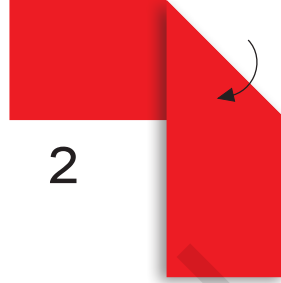


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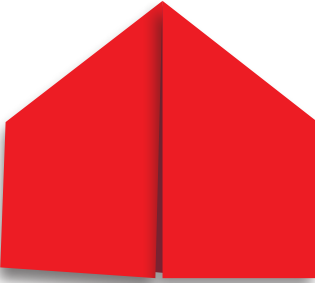




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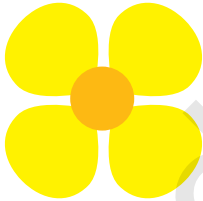
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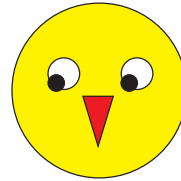
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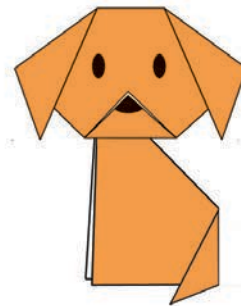
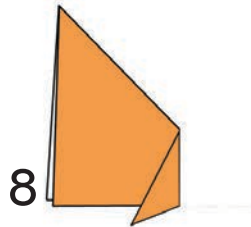
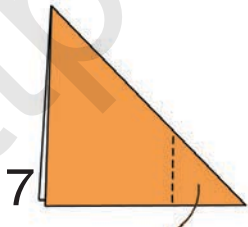
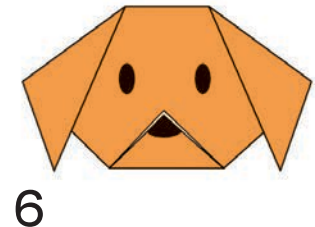
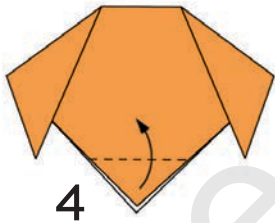
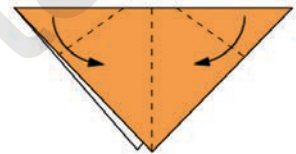
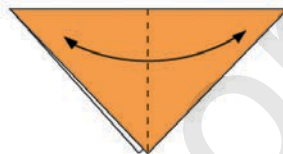
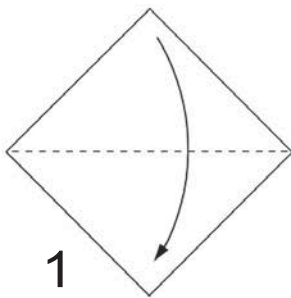


Bellik näme maksatda ýasalýar?
Ol size näme üçin gerek bolýar?



15-nji ders. KAGYZDAN GÜJÜK ÝASAMAK

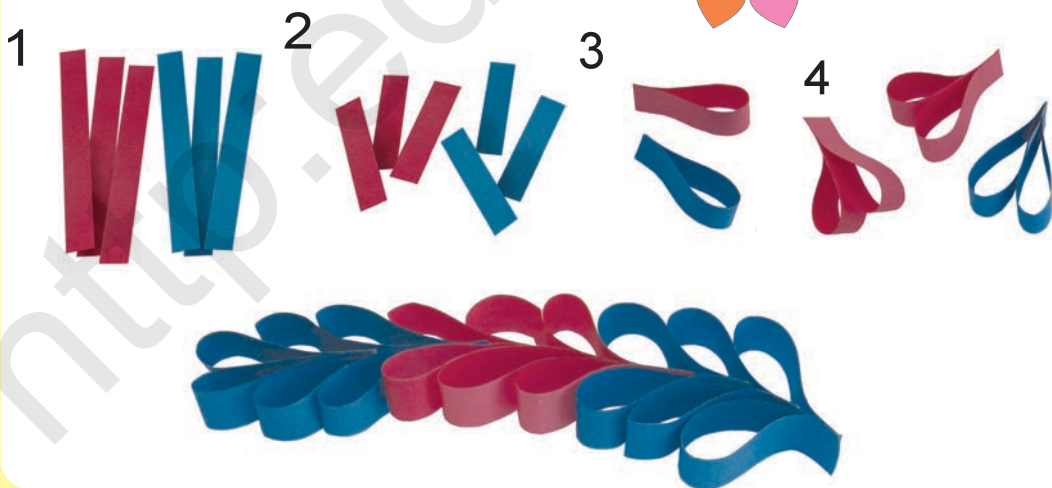
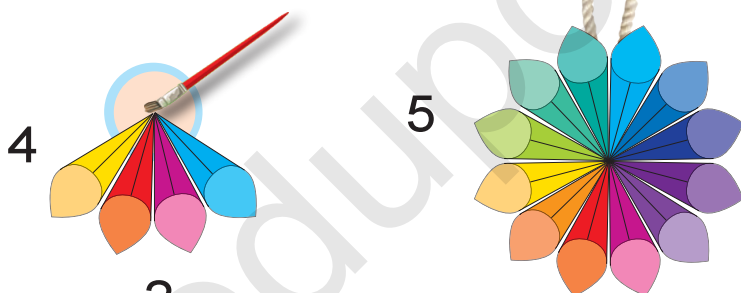
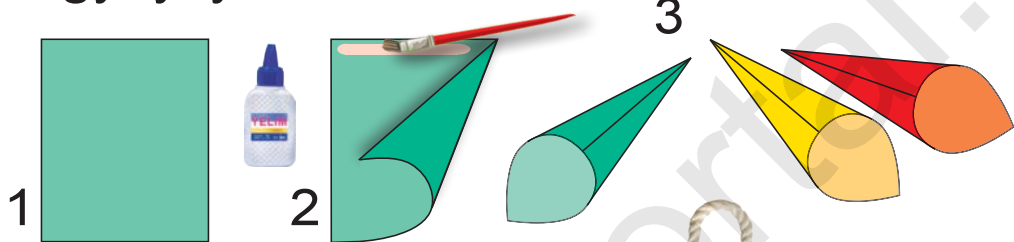
Kagyzy eplemegiň tehnikasy esasynda şekiller ýasamak sungatyna origami diýilýär.





TÄZE ÝYL ÜÇIN OÝNAWAÇLAR TAÝÝARLAMAK

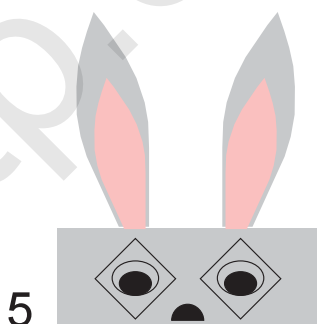
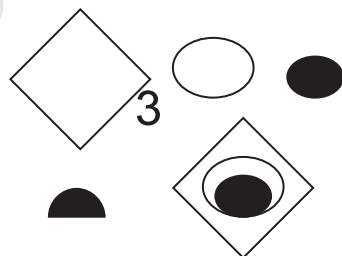
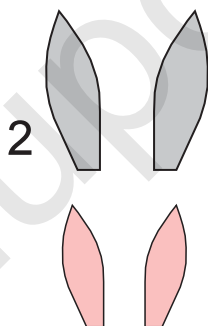
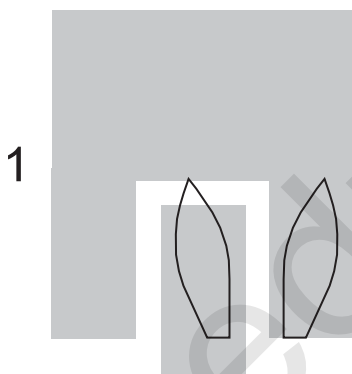
1-nji ýanwardan Täze ýyl başla-
nýar. Baýram bezeglerini ýasap, synp
otagyňyzy bezäň.





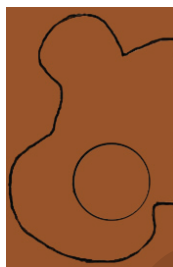
16 -njy ders. BAÝRAMLAR ÜÇIN NYKAPLAR TAÝÝARLAMAK

Towşan nykabyny ýasamak

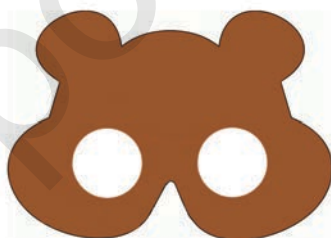




Aýy nykabyny ýasamak



Kagyzy iki epläp, üňni esasynda
aýynyň kelle bölegini çyzyp alyň.



Çyzyk boýunça gyrkyň. Arasyny açyň,
galamda gaşlaryny we tumşugyny çy-
zyň we reňkläň.





14-nji ýanwar — „Watan goraýjylary güni“

Armiýamyz – biziň parahatçylygymyzyň sakçysydyr. Güýçli, edermen harbylarymyz ýerde, suwda, howada gulluk edýärler.



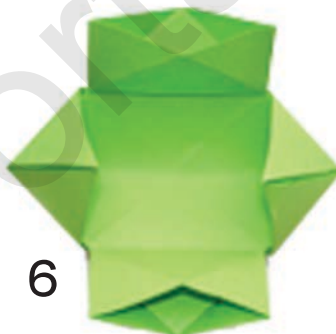
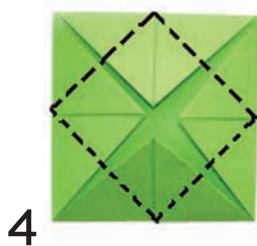
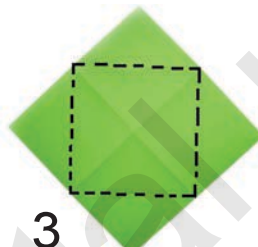
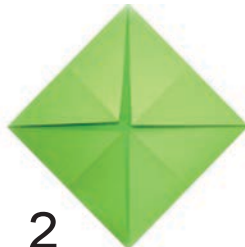
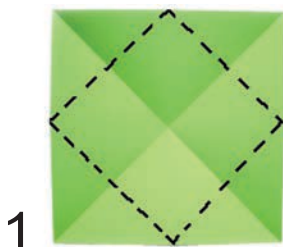
Olaryň gullugy nähili tehnika bilen bagly?



Siziň maşgalaňyzda gulluk edenler ýa-da gulluk edýänler barmy? Olar üçin dürli sowgatlary taýýarlaň.



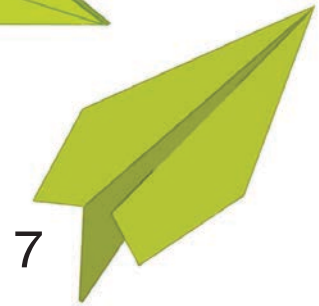
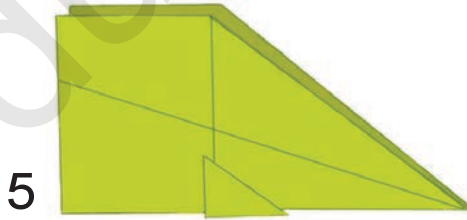
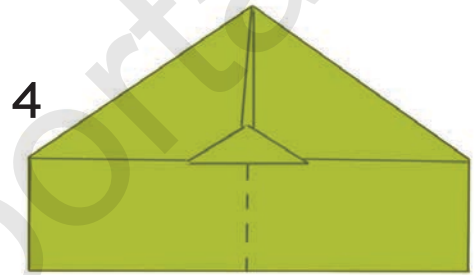
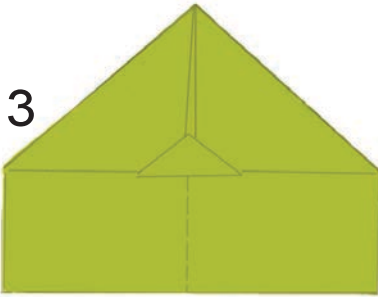
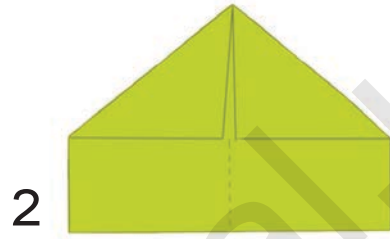
17-nji ders. KAGYZDAN OÝNAWAÇLAR ÝASAMAK

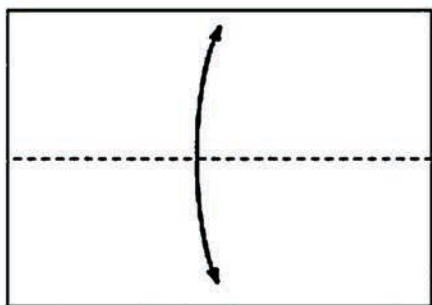


Özüňiz ýasan gämijigiňizden siz nähili peýdalanmakçy? Ony kime sowgat etmek mümkin?

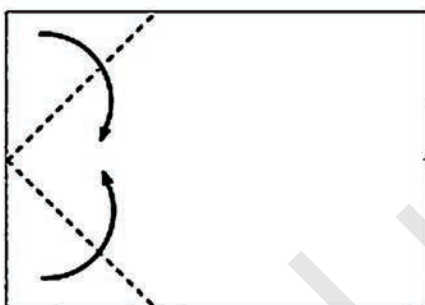


Uçýan planer ýasamak

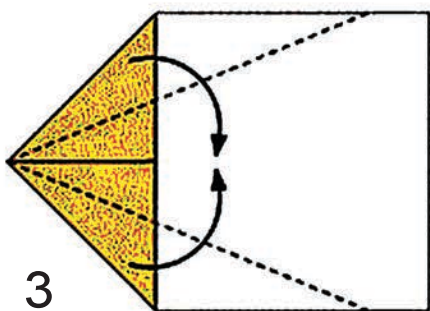




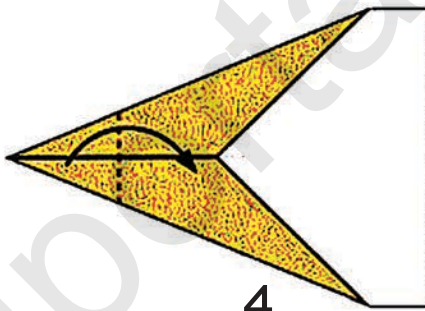
1



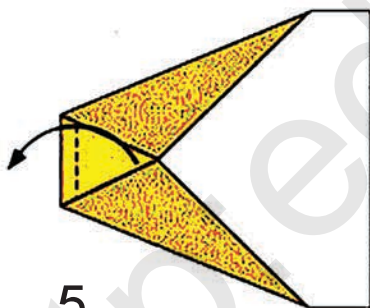
2



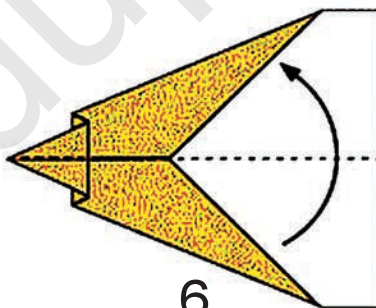
3



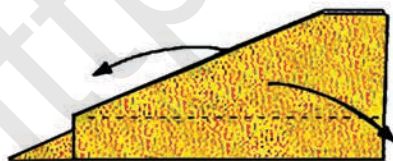
4



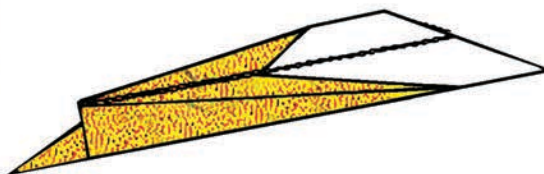
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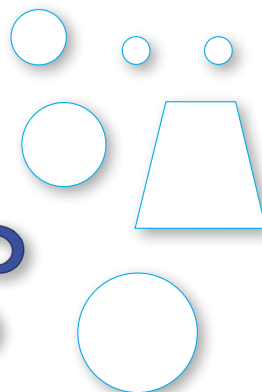
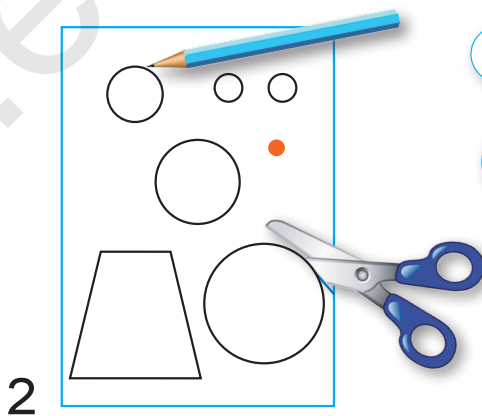


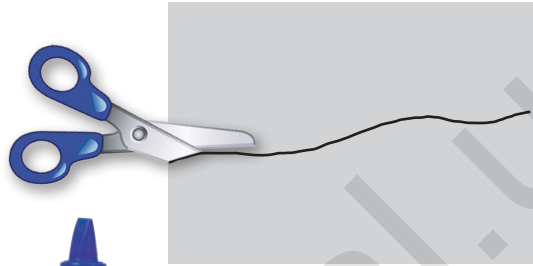
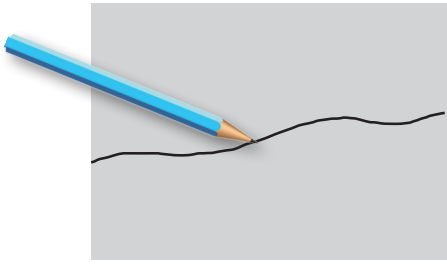
7





18-nji ders. GYŞYŇ GÖRNÜŞINI APPLIKASIÝA USULYNDÄ ÝASAMAK

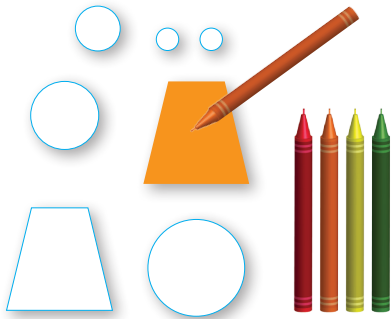




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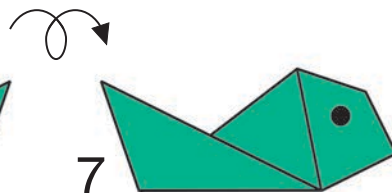
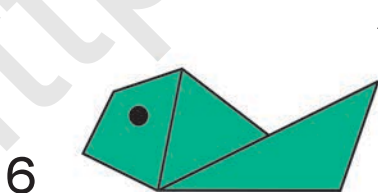
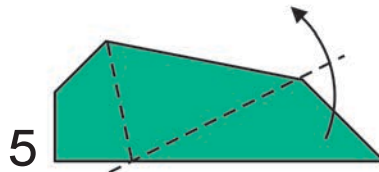
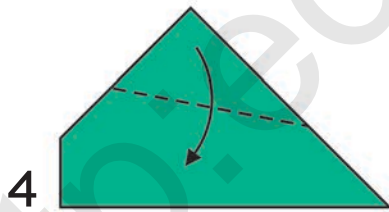
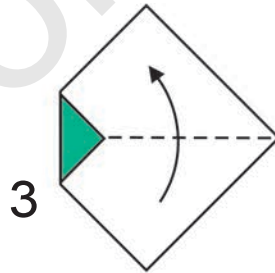
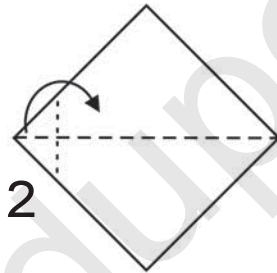
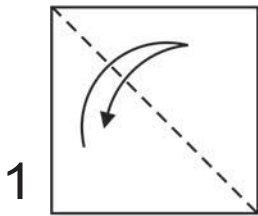
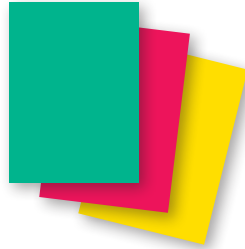


6





19-njy ders. REŇKLI KAGYZDAN JANDARLARYŇ ŞEKILINI GURMAK-ÝASAMAK





1



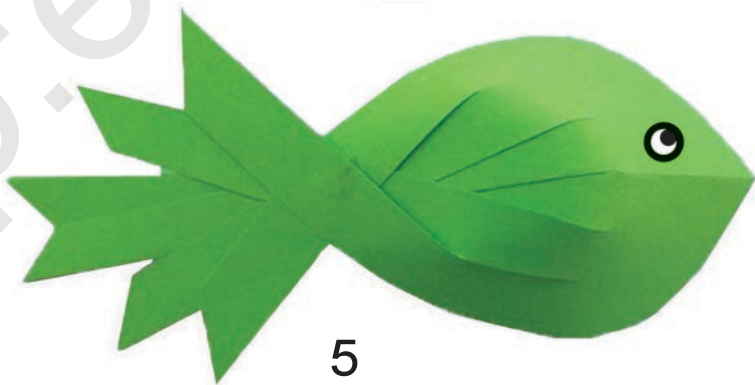
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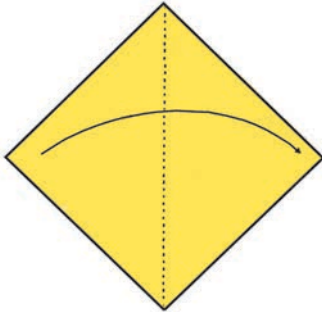
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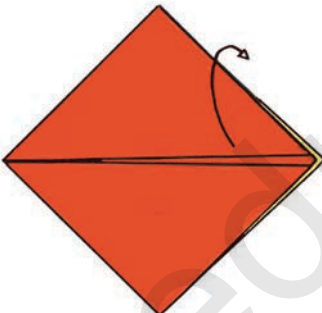
20-nji ders. KAGYZDAN TILKINIŇ ŞEKILINI GURMAK-ÝASAMAK



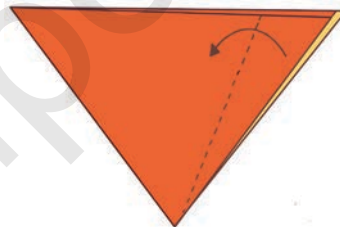
1



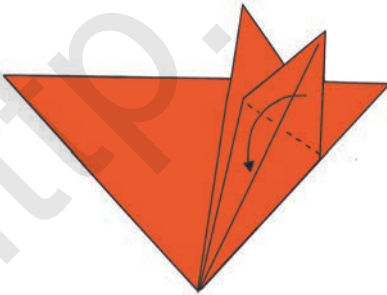
2



3



4



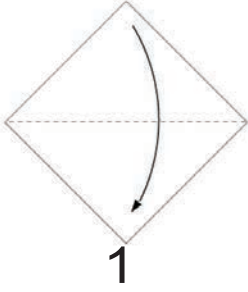
5



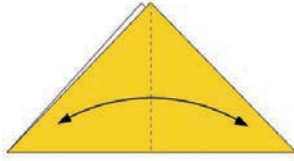
6



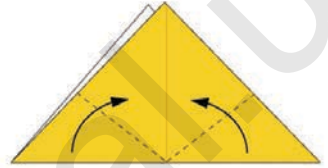
KAGYZDAN PIŞIGIŃ ŞEKILINI GURMAK-ÝASAMAK



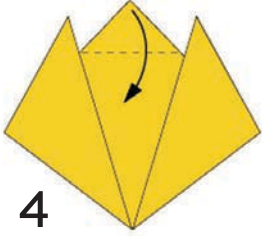
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21-nji ders. MOZAIKA BARADA DÜŞÜNJE

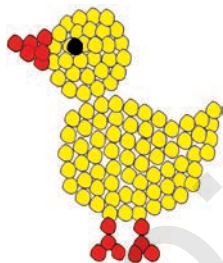


Maýda kagyz bölejiklerini nähili zygiderlikde ýelmemek mümkin?

Guşlar nähili şekillendirilen? Nämesi bilen meňzeş?



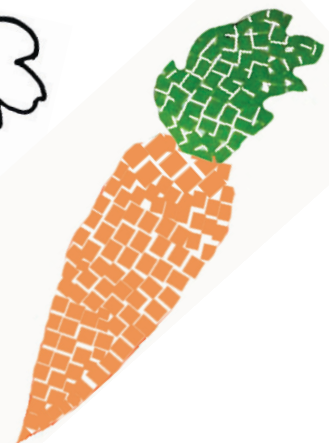
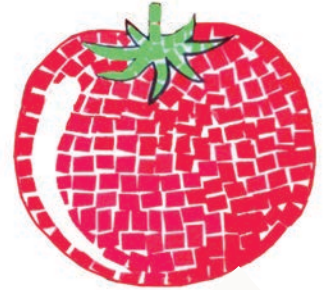
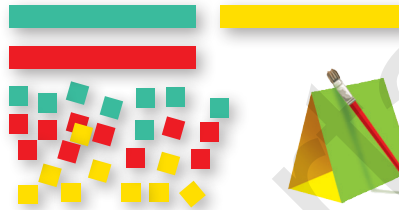
Mozaika – maýda bölejiklerden düzülen nagyş we suratdyr.

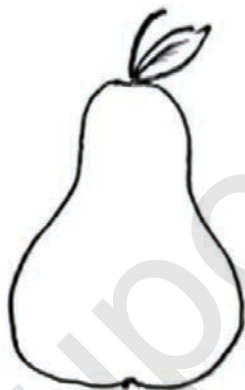
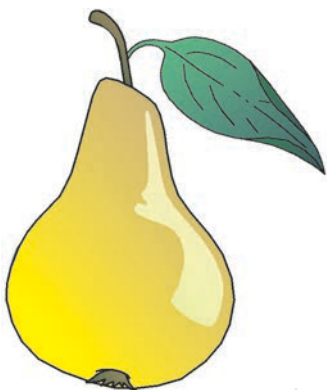
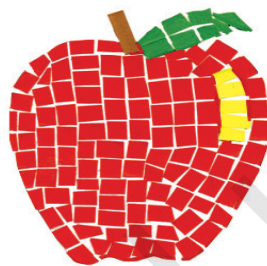
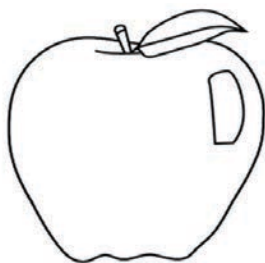


Siziň pikiriňizçe, mozaika döretmek üçin nähili kagzy almak amatly bolýar? Ýuka kagzmy ýa-da galyň kagzmy? Kagyz bölejiklerini nähili ýelmemeli eken?



22-nji ders. MOZAIKA USULYNDÄ GÖK ÖNÜMLERİŇ ŞEKILINI ÝASAMAK





Kagyz salftkany maýda edip gyrkyp, togalak şekile getiriň we ony çyzyý alan şekiliňiziň üstüne bir tekiz ýelmäň.





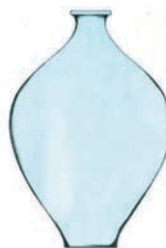
23-nji ders. DIZAÝNERLIK KÄRI

Dizaýn – bu oýlanmak, çyzmak, taslama düzmek.

Dizaýner – taslama düzüji suratkeşdir.

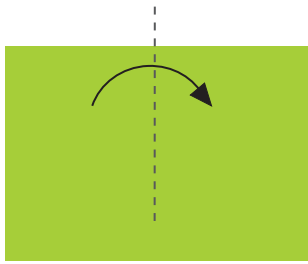
Dizaýnerlik käri — senagat estetikasy boýunça hünärmen suratkeş.

Dizaýnerlik gyzykly kär. Bu kârdäki adamlar hemişe täze zatlary oýlap tapýarlar. Bular öý enjamlary, geýimler, tehniki esbaplar we örän köp başga zatlar bolmagy mümkin. Suratda berlen zatlaryň gurluşyndaky we bezelişindäki tapawutlary tapyň.

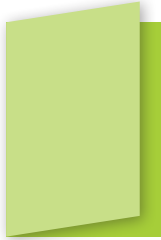




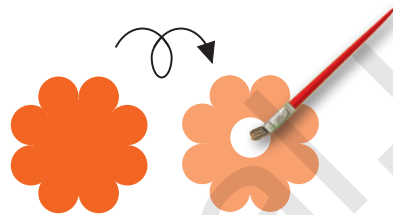
8-NJI MART BAÝRAMYNA GUTLAG HATY TAÝÝARLAMAK



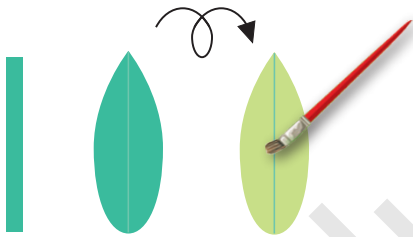
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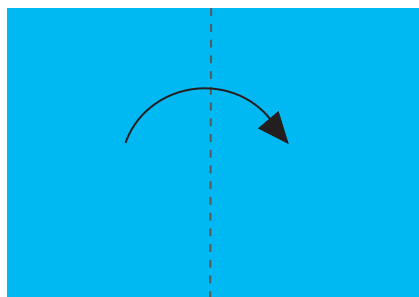


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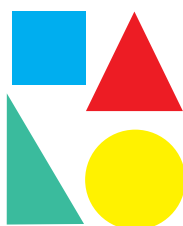
24-nji ders. NOWRUZ BAÝRAMYNA GUTLAG HATY TAÝÝARLAMAK



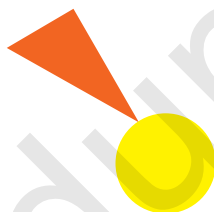
1



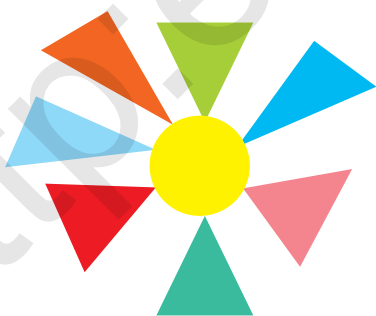
2



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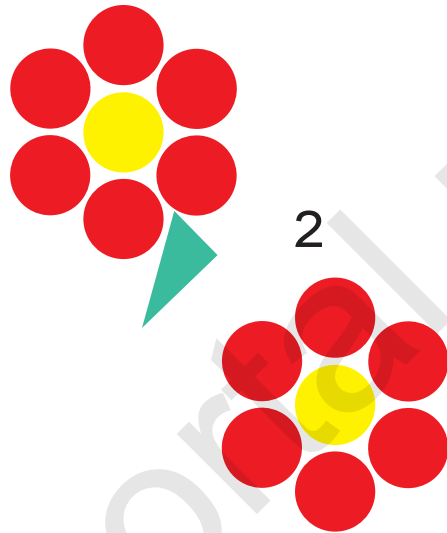
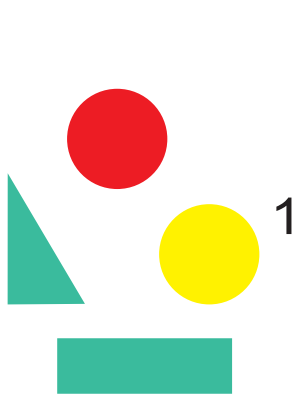


4



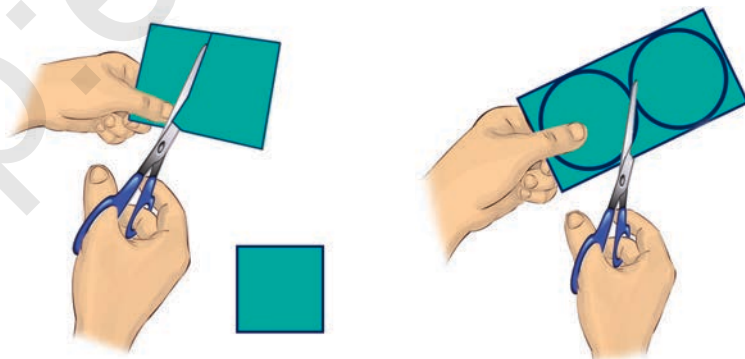
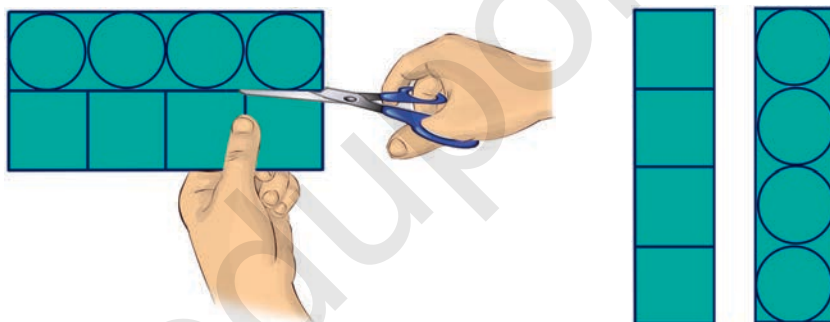
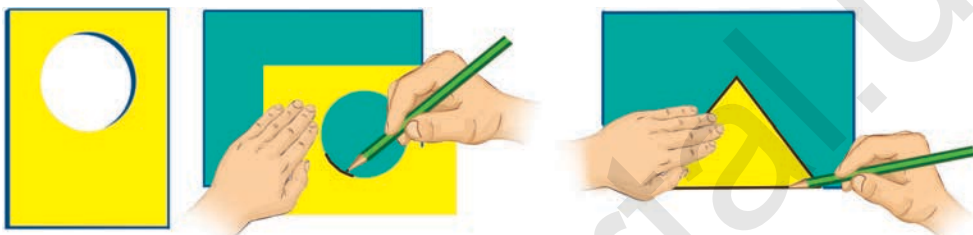
5





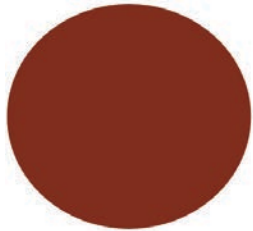


25-nji ders. GEOMETRIK ŞEKILDÄKI KAGYZLARY GYRKMAGYŇ USULLARY





26-njy ders. GEOMETRIK ŞEKILDÄKI KAGYZLARDAN HAÝWANLARYŇ ŞEKILINI ÝASAMAK



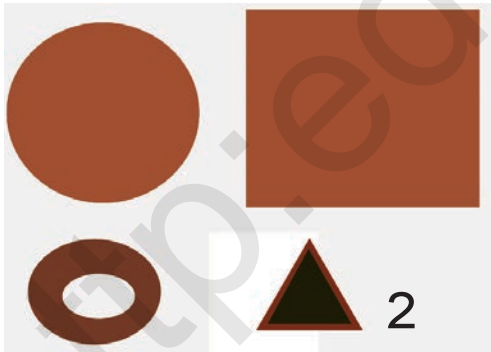
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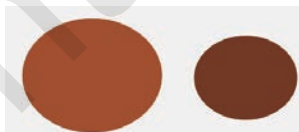
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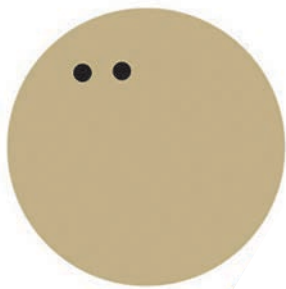


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GEOMETRIK ŐEKILDÄKI KAGYZLARDAN GUŐLARYŇ ŐEKILINI ÝASAMAK





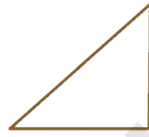
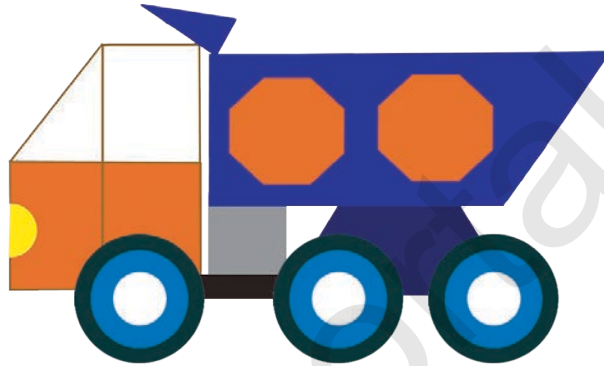
HAÝWANLARYŇ TESWIRINE SYN EDIŇ WE ÝASAJAK BOLUŇ

Suratda nähili haýwanlar şekillendirilipdir?
Olary ýasamak üçin siz nähili şekildäki ka-
gyzlardan peýdalanyp bilersiňiz?





27-nji ders. GEOMETRIK ŞEKILDÄKI KAGYZLARDAN MAŞYN GURMAK-ÝASAMAK



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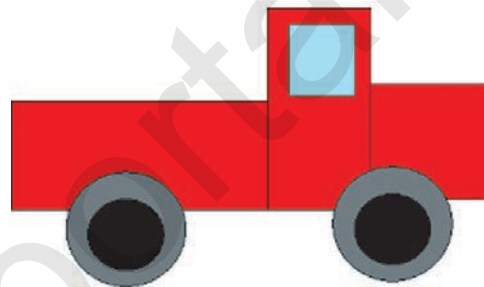


9



SYN EDIŇ WE ÝASAJAK BOLUŇ

Suratda nähili maşynlar şekillendirilen?
Şu suratlara garap özüňiz maşynyň şe-
kilini özbaşdak ýasajak boluň.





28-nji ders. MIWELERI WE GÖK ÖNÜMLERI SIMMETRIK ŞEKILLERDEN ÝASAMAK

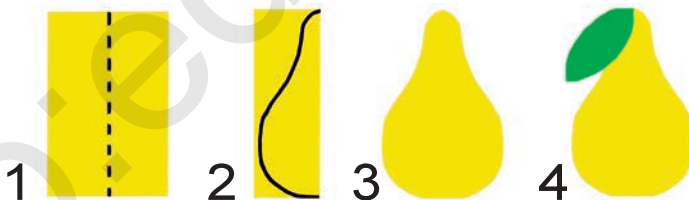
Suraty ünsli synlaň. Kagyz iki eplenenden soň nähili iş amala aşyrylýar?



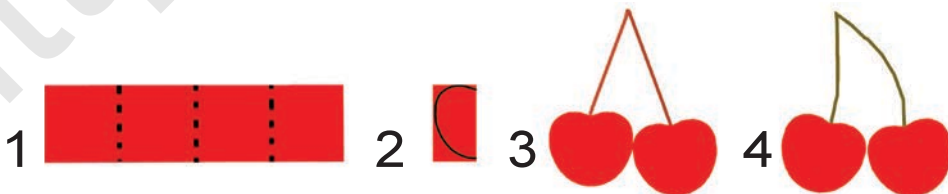
Almanyň şekilini kagyzy iki eplemek ýoly bilen taýýarlaň.

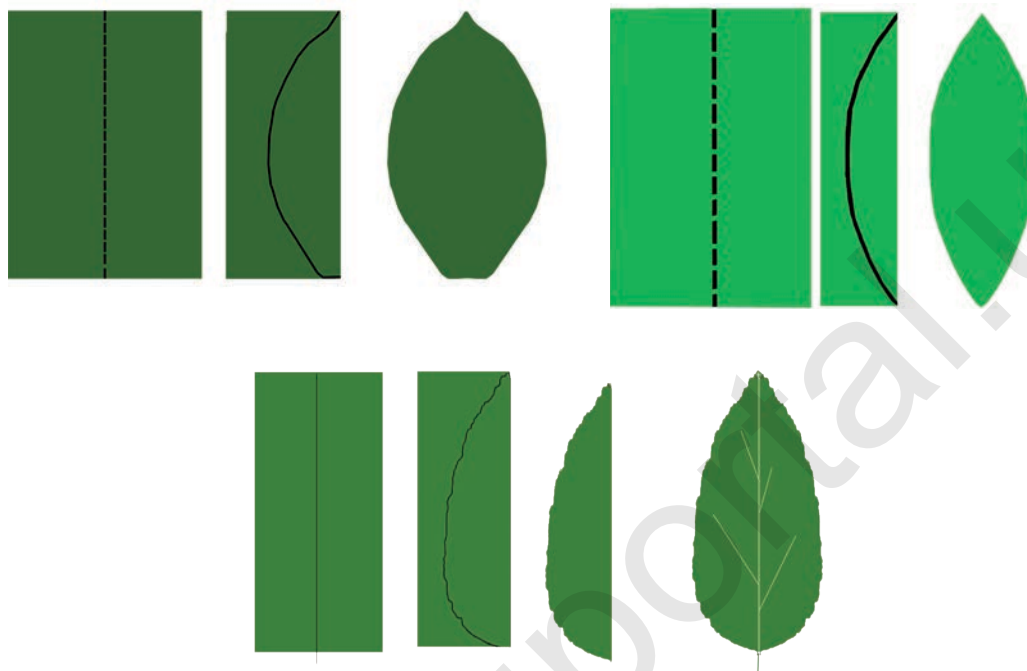


Uzyn kagyздan armydyň şekilini gyrkyň.



Kagyzy epläp, üljäniň şekilini taýýarlaň.





Taýýarlan miweleriňizi tarelka salyň.





29-njy ders. GURLUŞYKÇY KÄRI

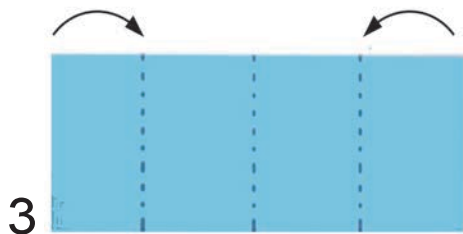
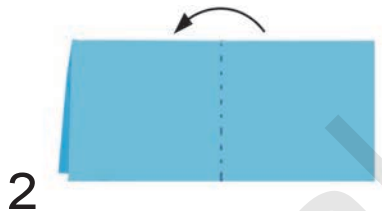
Köçä çyksaňyz, jaýlary, mekdebi, çagalar bagyny we dükanlary görýärsiňiz. Bu binalary gurmakda kerpiç örüji, suwagçy, neçjar, boýagçy we başga käriň eýeleri bilelikde zähmet çekipdirler.



Hany aýdyň, kim nähili işi ýerine ýetirýär?
Olaryň käri nähili atlandyrylýar?



ÖÝJAGAZYŇ MAKETINI GURMAK-ÝASAMAK



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ÖZÜÑİZ ÝASAJAK BOLUÑ.



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30-njy ders. KAGYZDAN „SEBETDÄKI GÜLLERI“ GURMAK-ÝASAMAK



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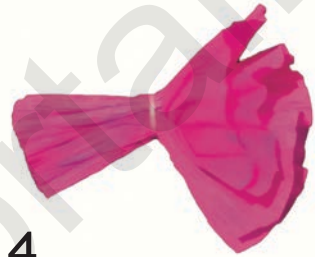
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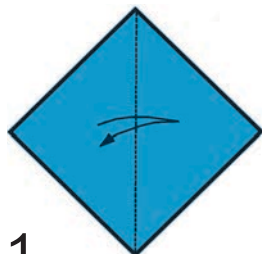
7



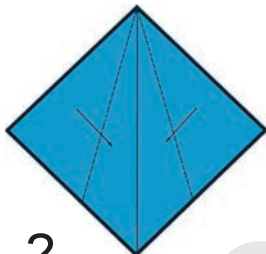
8



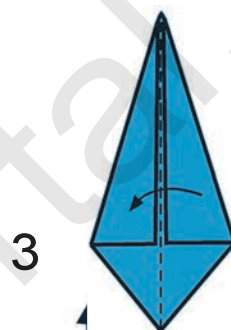
31-nji ders. KAGYZDAN EPLEMEK USULYND HAÝWANLARYŇ, GUŞLARYŇ ŞEKILLERINI ÝASAMAK



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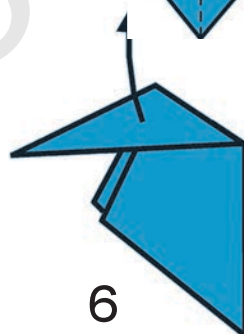
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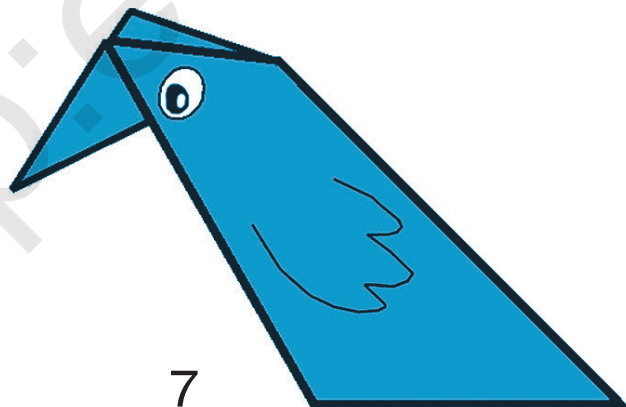
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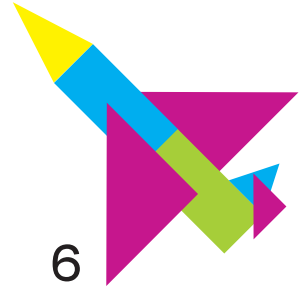
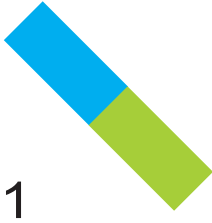
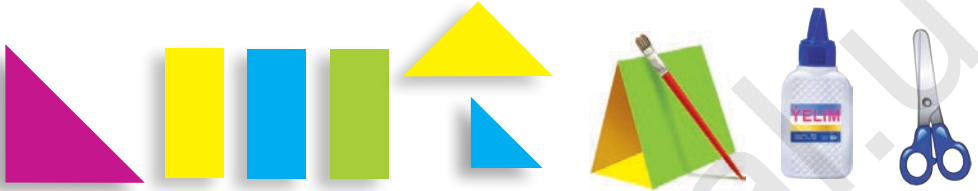
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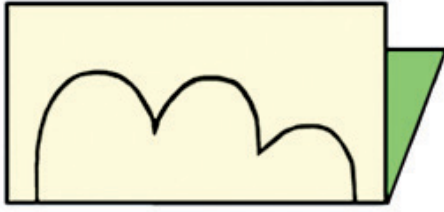


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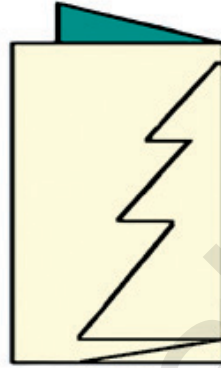


BARLAG İŞİ ÜÇİN NUSGA YUMUŞLAR

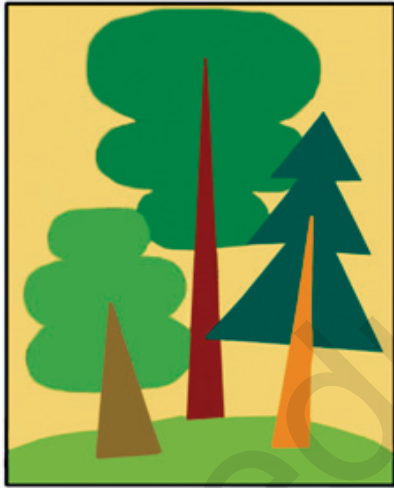




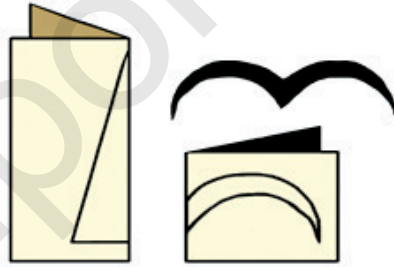
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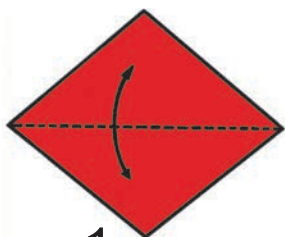
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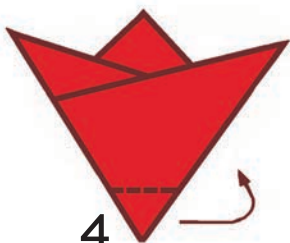
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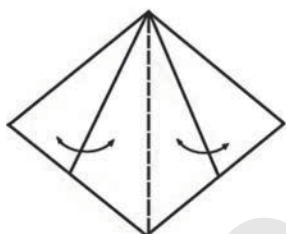
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6



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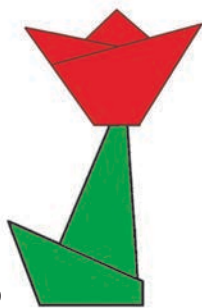
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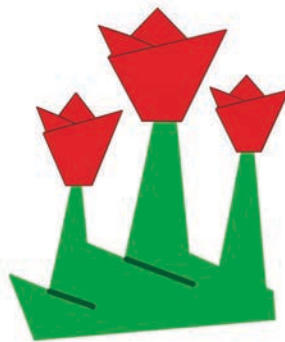
3



4



5





KÄR USSALARY GÜRRÜŇ BERÝÄRLER

ORNAMENT WE NAGYŞ

Ornament diýip, arhitektura we amaly sungat eserlerindäki esasy elementlerden birine aýdylýar. Ol çyzyklardan we reňklerden ybarat bolup, binalaryň we enjamlaryň üstüni boýamak, deşmek we oýup işlemek ýoly bilen döredilýär.

Nagyş bolsa dürli zatlara, mebellere, jaýlara oýup we boýap çekilýän güldür. Jaýlara, dürli zatlara we mebellere oýup işleýän hem-de reňkli boýaglar bilen bezeýji suratkeşe **nakgaş** diýilýär.

Özbekistanda nakgaşlyk sungaty gadymdan ösüp gelýär. Zynatly ýadygärlikler häzire çenli özüniň özüne çekijiligini ýitirenok. Umuman, nagyş gül bezegi diýen manyny aňladýar.



KAGYZ

Mekdebi kagyzsyz göz öňüne getirmek gaty kyn. Depder, kitap, synp žurnaly, gündelik depder hem kagyздan taýýarlanýar. Kagyz biziň durmuşymyzda iňňän möhüm rol oýnaýar. Bir list kagyz taýýarlamak üçin näçe-näçe adam zähmeti talap edilýär. Kagyzy birinji bolup hytaýlylardan Tsaý Lun balykçylyk torundan taýýarlap görüpdir. Bu möhüm oýlap tapma diňe bir Hytaý däl, eýsem bütin adamzat üçin uly ähmiýete eýe boldy.

Özbekistanda Temurler hökümdarlygy döwründe kagyz öndürmäge aýratyn üns berlipdir. Şu sebäpli-de Samarkant kagyzy Orta asyr Gündogar hatdatlarynyň arasynda gaty gadyrlanypdyr, belli bir bölegi bolsa daşary ýurtlara-da ýaýrapdyr. Kagyz öndürmek tehnologiýasy müň ýyldan artyk taryha eýe bolsa-da, ol henizem ösüşini dowam etdirýär.



GAÝÇY

Arheologlar tarapyndan harabalardan tapylan gaýçy iň gadymy gaýçylardan hasaplanyp, onuň ýaşy 3–4 müň ýyllara dogry gelýär. Bu gaýçy ilki adamyň özüne hyzmat etmek üçin däl-de, belki goýnuň ýüňüni gyrgmak üçin oýlanyp tapylypdyr.

Ol iki müň ýyldan köpräk wagtyň dowamynda üýtgezsiz ulanylyp gelipdir.

Şundan soň, takmynan 1000 ýyl öň, hünärmentler iki pyçagy myh bilen birleşdirip we olaryň sapyny halkalara öwürüp, gaýçyny amatlyrak görnüşde oýlap tapypdyrlar. Soňluk bilen, gaýçynyň gurluşyny barha kämilleşdirmek netijesinde ol dellekleriň we lukmanlaryň iş serişdelerine öwürlipdir. Her bir ussa özüniň gaýçysyny barha kämilleşdiripdir. Şeýlelikde ýörite gaýçylar peýda bolupdyr. Meselem: bagban, dellek, tikiçi, hirurg gaýçylary we başgalar.



APPLIKASIÝA

Applikasiýa latyn dilinde „birikdirme“ diýen manyny aňladýar. Bu gadymy sungat görnüşlerinden biridir. Applikasiýa kagyz, karton ýa-da mata böleklerinden, guradylan güllerden we ýapraklardan ýelmemek arkaly döredilýär. Her bir halkyň applikasiýasy şekili, reňki we özboluşlylygy bilen bir-birinden tapawutlanýar.



ORIGAMI

Origami „rejelemek we eplemek“ diýen manyny aňladýar. Origami tehnologiýasynda gaýçy ulanylmaýar. Origami sungaty Ýaponiýada kagyz öndürmek döwründen başlap ösüp gelipdir. Orta asyrlarda ol ýapon aristokratlarynyň medeniýetiniň bir bölegine öwrülipdir. Häzirki günde origami tehnologiýasy bilen meşgullanmak diňe bir Ýaponiýada däl, eýsem bütin dünýäde adamlaryň söýgüli ýadawlygy aýyrýan işlerine öwrülipdir.

M A Z M U N Y

1-nji ders.	TEHNOLOGIÝA YLMY BARADA DÜŞÜNJE.....	3
2-nji ders.	„ALTYN GÜÝZ“ GÖRNÜŞINI ÝASAMAK.....	8
3-nji ders	ÝAPRAKLARDAN NAGYŞ KOMPOZISIÝASYNY DÖRETMEK.....	11
4-nji ders.	ÝAPRAKLARDAN ÖÝ GUŞUNYŇ ŞEKILINI ÝASAMAK	13
5-nji ders.	ÝAPRAKLARDAN HAYWANLARYŇ ŞEKILINI ÝASAMAK	15
6-njy ders.	ÝAPRAKLARDAN ÖÝ GUŞLARYNY ÝASAMAK.....	17
7-nji ders.	TEBIGY WE DÜRLI MATERIALLARDAN GUŞLAR ÝASAMAK	18
8-nji ders.	TEBIGY WE DÜRLI MATERIALLARDAN KOMPOZISIÝA DÖRETMEK.....	19
9-njy ders.	TOHUMLARY ÝYGMAK WE SAKLAMAK.....	20
10-njy ders.	TOHUMLARDAN NAGYŞ ÝASAMAK.....	21
11-nji ders.	BALYGYŇ ŞEKILINI ÝASAMAK.....	23

12-nji ders.	ÇOPANTELPEK GÜLÜNİ ÝASAMAK.....	24
13-nji ders.	KAGYZ WE ONUŇ GÖRNÜŞLERİ.....	27
14-nji ders.	KITAP ÜÇİN BELLİK ÝASAMAK	32
15-nji ders.	KAGYZDAN GÜJÜK ÝASAMAK.....	34
16-njy ders.	BAÝRAMLAR ÜÇİN NYKAPLAR TAÝÝARLAMAK.....	36
17-nji ders.	KAGYZDAN OÝNAWAÇLAR ÝASAMAK.....	39
18-nji ders.	GYŞYŇ GÖRNÜŞİNİ APPLIKASIÝA USULYND A ÝASAMAK.....	42
19-njy ders.	REŇKLI KAGYZDAN JANDARLARYŇ ŞEKILINI GURMAK-ÝASAMAK.....	45
20-nji ders.	KAGYZDAN TILKINIŇ ŞEKILINI GURMAK-ÝASAMAK.....	47
21-nji ders.	MOZAIKA BARADA DÜŞÜNJE	49
22-nji ders.	MOZAIKA USULYND A GÖK ÖNÜMLERİŇ ŞEKILINI ÝASAMAK.....	50
23-nji ders.	DIZAYNERLIK KÄRI	52

24-nji ders.	NOWRUZ BAÝRAMYNA GUTLAG HATY TAÝÝARLAMAK	54
25-nji ders.	GEOMETRIK ŞEKILDÄKI KAGYZ- LARY GYRKMAGYŇ USULLARY.....	56
26-njy ders.	GEOMETRIK ŞEKILDÄKI KAGYZLAR- DAN HAÝWANLARYŇ ŞEKILINI ÝASAMAK	57
27-nji ders.	GEOMETRIK ŞEKILDÄKI KAGYZLAR DAN MAŞYN GURMAK-ÝASAMAK	60
28-nji ders.	MIWELERI WE GÖK ÖNÜMLERI SIMMETRIK ŞEKILLERDEN ÝASAMAK.....	62
29-njy ders.	GURLUŞYKÇY KÄRI	64
30-njy ders.	KAGYZDAN „SEBETDÄKI GÜLLERI“ GURMAK-ÝASAMAK.....	67
31-nji ders.	KAGYZDAN EPLEMEK USULYNDÄ HAÝWANLARYŇ, GUŞLARYŇ ŞEKILLERINI ÝASAMAK	69
	BARLAG IŞI ÜÇIN NUSGA ÝUMUŞLAR.....	70
	KÄR USSALARY GÜRRÜŇ BERÝÄRLER	73

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**Ilgizar Ahmadovna Mannopova
Rahima Abdurazzoqovna Mavlonova
Nazokat Ravshanxonovna Ibragimova**

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1-sinfi uchun darslik**

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